MEGA NVR
User Manual

201310 200 A1

About This Document

This manual is intended for administrators and users of MEGA NVR free-bundled NVR application for the IP cameras. It covers configuration of the MEGA NVR as well as instructions for using and managing MEGA NVR on your devices. Later versions of this document will be posted on the official website, as required.

The use of video surveillance devices can be prohibited by laws that vary from country to country. It is the user's responsibility to ensure that the operation of such devices is legal before installing this unit for surveillance purposes.

Version history

Version	Description	Date
A1	Initial release	2013-10

Table of Contents

1 Introduction 1

2 System initialization 3

2.3 Installation Wizard 5

2.4 Exit the system 10

2.5 Log Off and Switch Login User 11

3 Live view 12

3.1 The Live View page 12

3.2 About the MEGA NVR System Version 18

3.3 System Information 19

3.4 Two-way audio chat and broadcast control 20

3.5 Digital Zooming 21

3.6 Snapshot Browsing 22

3.7 Speed Dome Camera Control 23

4 System Settings 29

4.1 System Configurations 29

4.2 Storage Settings 32

4.3 User Account Management 34

4.4 Hardware Monitoring 40

4.5 IP Camera Management 41

4.6 Group Settings 51

4.7 Sequence Settings 53

4.8 Event Action Settings 56

4.9 SMS / Email Settings / FTP Settings 59

4.10 DO (Digital Output) Settings 62

4.11 Sensor Settings 64

5 Playback & Log search 66

5.1 Playback 66

5.2 Event Log Query 81

6 Network Service Configuration 83

7 Remote web client 86

7.1 Log-in and Live View page 86

7.2 Remote event search 89

7.3 Remote video playback 90

8 MEGA Player 92

9 Abbreviation and definition 94

1 Introduction

MEGA NVR is Windows-based NVR software provides up to 32 channels video management and is able to process live view, recording, playback, and event management. It acts as an excellent surveillance platform which handles all of video/audio streaming for collection, compression, transmission, storage, analysis, monitoring and management.

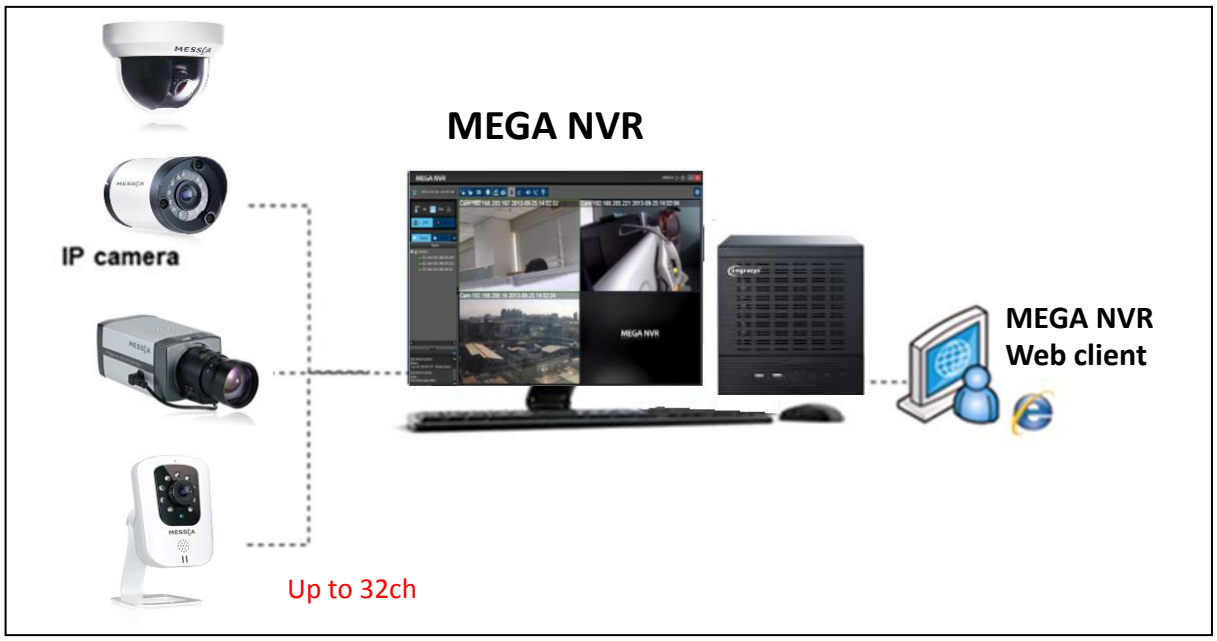


Figure A

1.1 Software Specification

Max. recording channel		● 32 channels
Resolution for monitor displaying		● 16：9, 16：10, 4：3, 5：4
Language		● English ● Traditional Chinese ● Simplified Chinese ● Portuguese ● Czech
Video format		● MPEG-4, MJPEG, and H.264 compression format
Real-time video functions		● Auto reconnect ● Manual recording ● PTZ & digital PTZ ● Duplicate & remove channel display ● Audio：Listening, 2-way voice chat and audio broadcasting ● Manual snapshot & snapshot viewer ● Popup alarming video window
Display layout	Live view	● 1, 4, 8, 9, 10, 13, 16, 17, 24, 25, 33, 36, 49,64
	Playback	● 1,4, 8, 9, 10, 13, 16
Playback video functions		● Speed for playback：1X, 2X, 4X, 8X, 16X, 32X, 1/2X, 1/4X, 1/8X, 1/16X and 1/32X ● Max. channels for video / audio：16 / 1 ● Reverse playing supported ● Event search：Search by event ● Smart search：Search by motion detection ● Thumbnails search：Search by thumbnails decoded from recording file with certain time interval ● Video saving as AVI format ● Snapshot saving and printing in JPEG format
Backup / Restoring		● Supports two types of media (hard drives and compact discs) for backup and restoring
Event alarm		● Hardware & storages monitoring ● Motion detection ● DI sensors ● Camera signals ● Manual recording
Action for event		● Recording ● Display live video in a pop out window ● PTZ preset point action ● Start / stop or control digital-out devices ● Launch other applications ● Send e-mails / SMS ● Take snapshot ● Playing audio or trigger hardware build-in buzzers
Remote Operation		● Live view, Playback, Event searching, PTZ controlling
User Management		● Controlling and setting for Local / Remote logging permission, and users /groups accounts
Hardware Monitor		● Real-time monitoring and notification for the CPU temperature, the CPU loading and status of system fans

2 System initialization

2.1 Installation

To install the MEGA NVR software, make sure your computer meet the system requirements as listed in the table below. Then just double-click the setup file and follow the on-screen instructions to complete the installation.

OS & Browser		Server: Windows 7, 32 and 64 bit Remote Client: Windows 7, 32 and 64 bit, IE browser 9 and 10, 32 bit
HUB/Switch		Giga LAN(1000 Mb/s)
Server without local client	Less than 16 ch	CPU : Intel Pentium G860 Dual core, 3.0GHz or above RAM : 4G
	32 ch	CPU : Intel Core i5-3470, 3.2GHz or above RAM : 4G
Server with local client	Less than 16 ch	CPU : Intel Core i5-3470, 3.2GHz or above RAM : 4G Display Card : nVidia chipset, 1G DDR3 or above
	32 ch	CPU : Intel Core i7-3770, 3.4GHz or above RAM : 4G Display Card : nVidia chipset, 1G DDR3 or above
Remote Client	Less than 16 ch	CPU : Intel Core i5-3470, 3.2GHz or above RAM : 4G Display Card : nVidia chipset, 1G DDR3 or above
	32 ch	CPU : Intel Core i7-3770, 3.4GHz or above RAM : 4G Display Card : nVidia chipset, 1G DDR3 or above

2.2 Login

Click the "Start" menu; select "Programs" -> "MEGA NVR" and click on the " **MEGA NVR** " icon to run the MEGA NVR software. (Figure 1-1)

Note：Default account：admin / Default password：1234

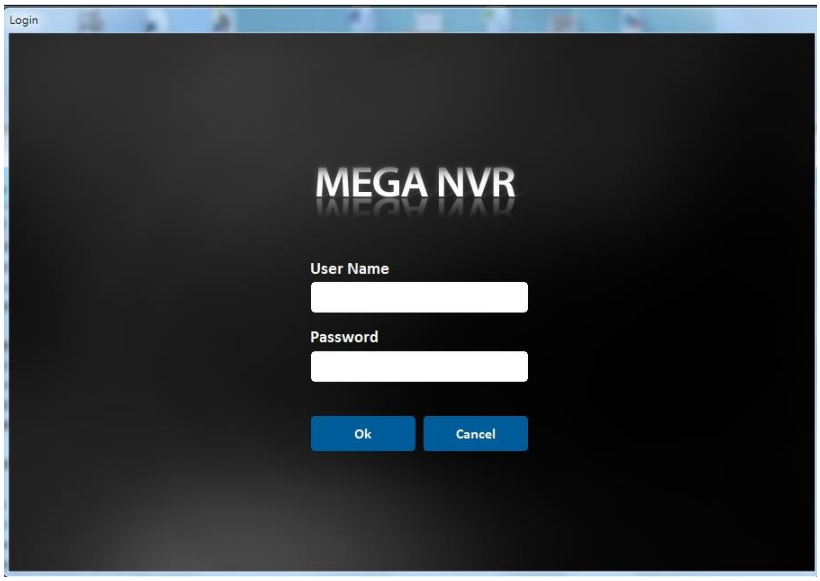


Figure 1-1

2.3 Installation Wizard

Once the MEGA NVR software has been lunched first time after the installation, the Installation Wizard will be also automatically started. This wizard will help users to easily configure the system setting values (ex. Snapshot Folder, Max Record Days, Recording Media, and the Free Space of the recording media) and Cameras Discovery.

Users are able to click： (Figure 1-2～Figure 1-6)

(1) System Setting (Figure 1-2)

- A Snapshot Folder：To assign a folder to store snapshot pictures.
- B Max Record Days：To specify the maximum days for reserving event logs.
- C Recording Media：To assign a storage partition for video / audio recording data.
- D Free Space：To specified the reserved space of this partition that assigned for storing recording data

A and C will be disabled (gray) until any available recording storage is installed.

Figure 1-2

OK：To start using MEGA NVR immediately and leave the wizard.

NEXT：To enter the next step of the wizard.

PREV：To back the previous step of the wizard.

Exit：To exit the wizard without saving.

(2) Cameras Discovery

Users are able to click to complete these system settings and enter the next step of the Installation Wizard – **Cameras Discovery**. It will help users to setup cameras easily and quickly. Users can click：(Figure 1-3)

Discovery：To start the cameras discovery procedure.

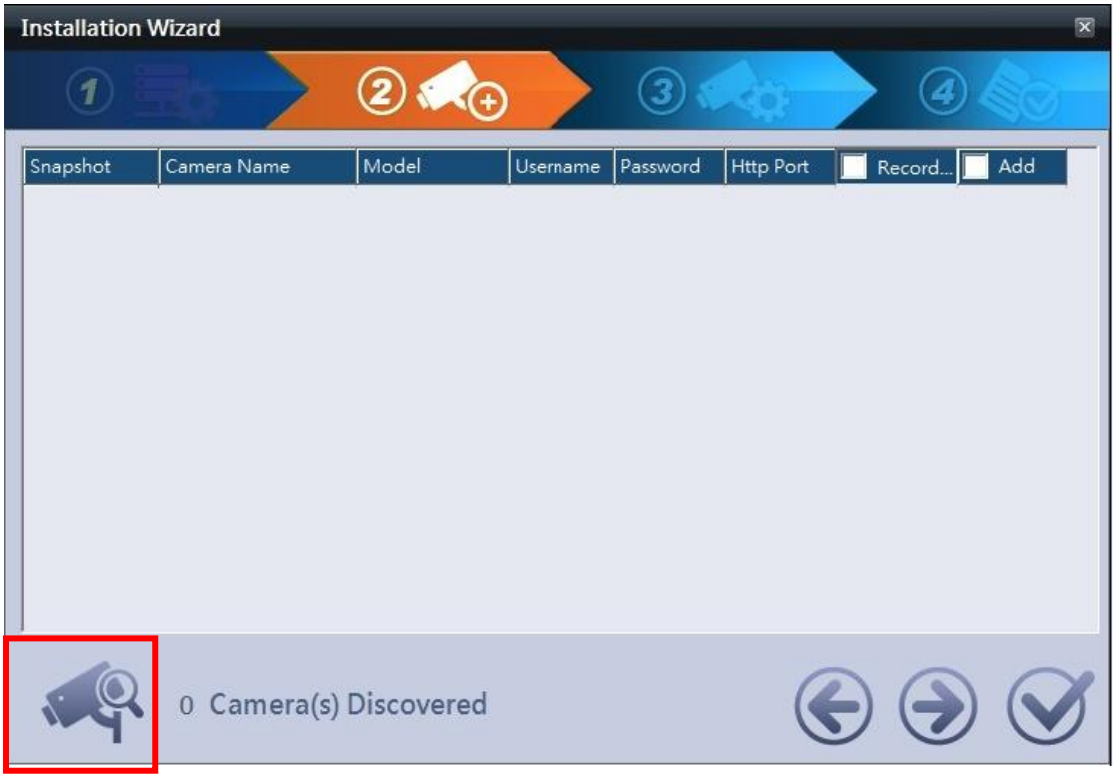


Figure 1-3

Ⓐ Recording (Figure 1-4)：To turn on / off the video recording function.

(Users are needed to prepare the storage of recording for each camera in the system configuration.)

Ⓑ Add (Figure 1-4)：To specify whether the camera to be managed or not.

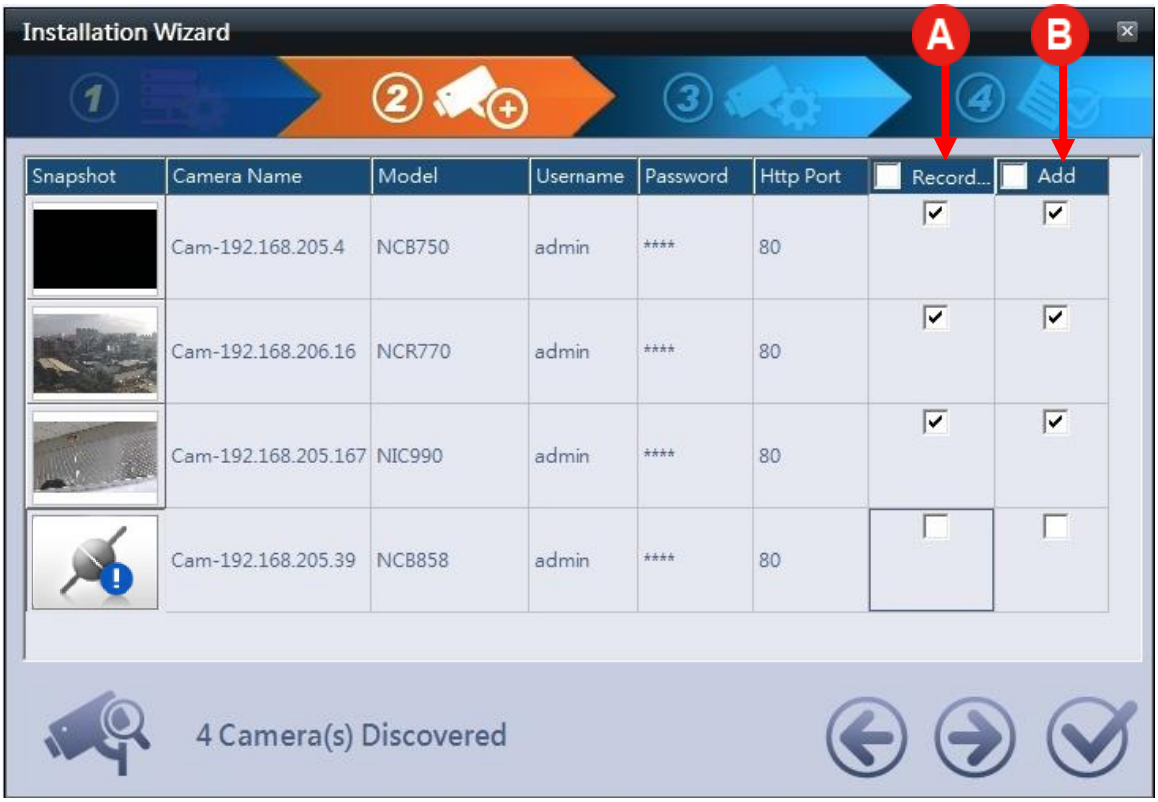


Figure 1-4

(3) Cameras Setup

- Ⓐ Record Stream：For assigning a stream for recording.
- Ⓑ Preview Stream：For assigning a stream for previewing.
- Ⓒ Motion Detecting：To turn on / off the motion detecting function.
- Ⓓ Audio Recording：To turn on / off the audio recording function.
- Ⓔ Recording Mode：To specify the recording mode. (Full-time Recording / Event-driven Recording)

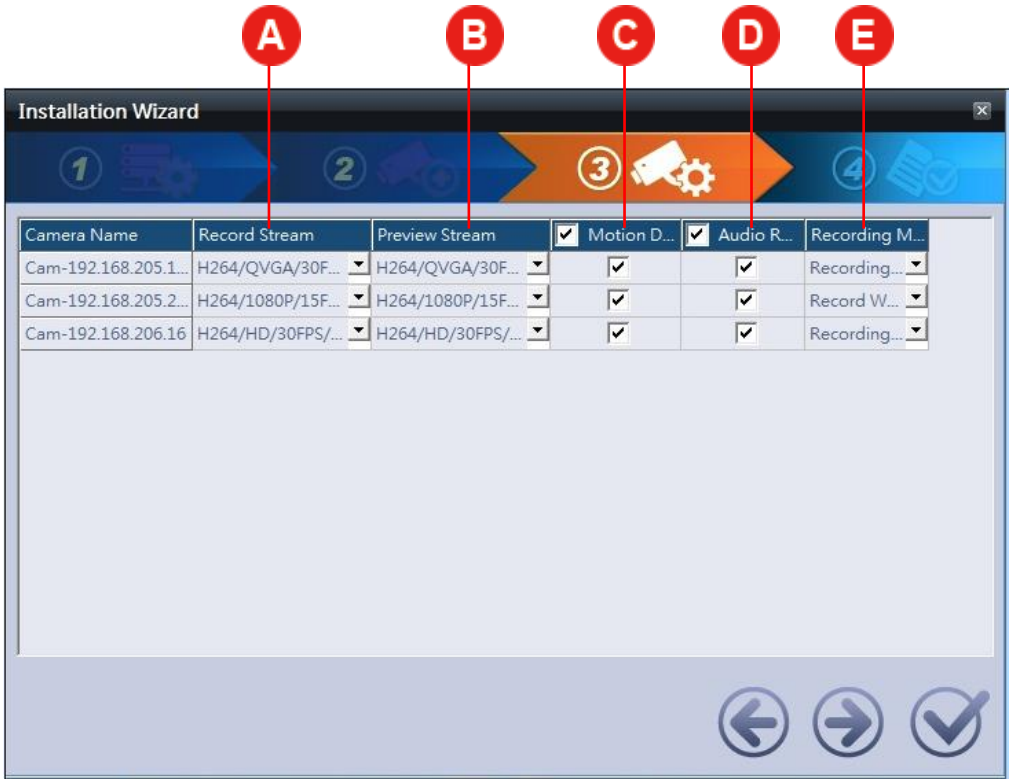


Figure 1-5

Note：All of these settings are also to be modified later in the System Configuration.

(4) Confirmation Step (Figure 1-6)

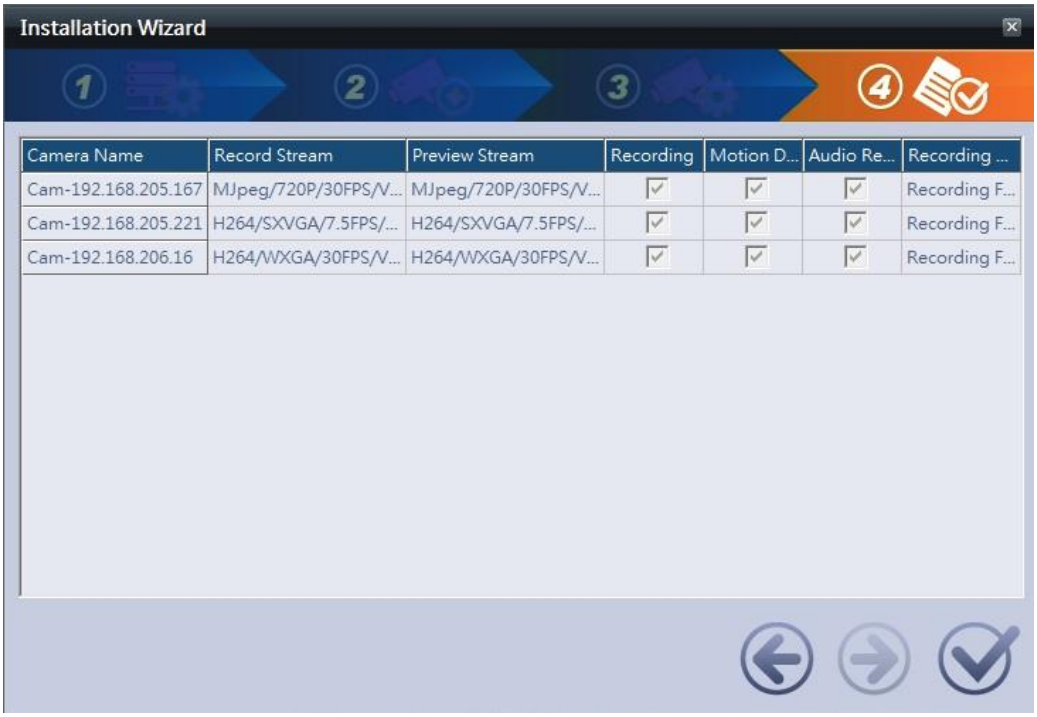


Figure 1-6

2.4 Exit the system

If user wants to exit from this program, on the main page of MEGA NVR software, click on the icon Exit AP (Figure 1-7a, A), which is located at the upper right corner, a dialog box which is titled **Exit** will be pop-up (Figure 1-7b) and you will need an authorized account to exit system. In the **Exit** dialog box, you may click the button Cancel to give up exiting system.

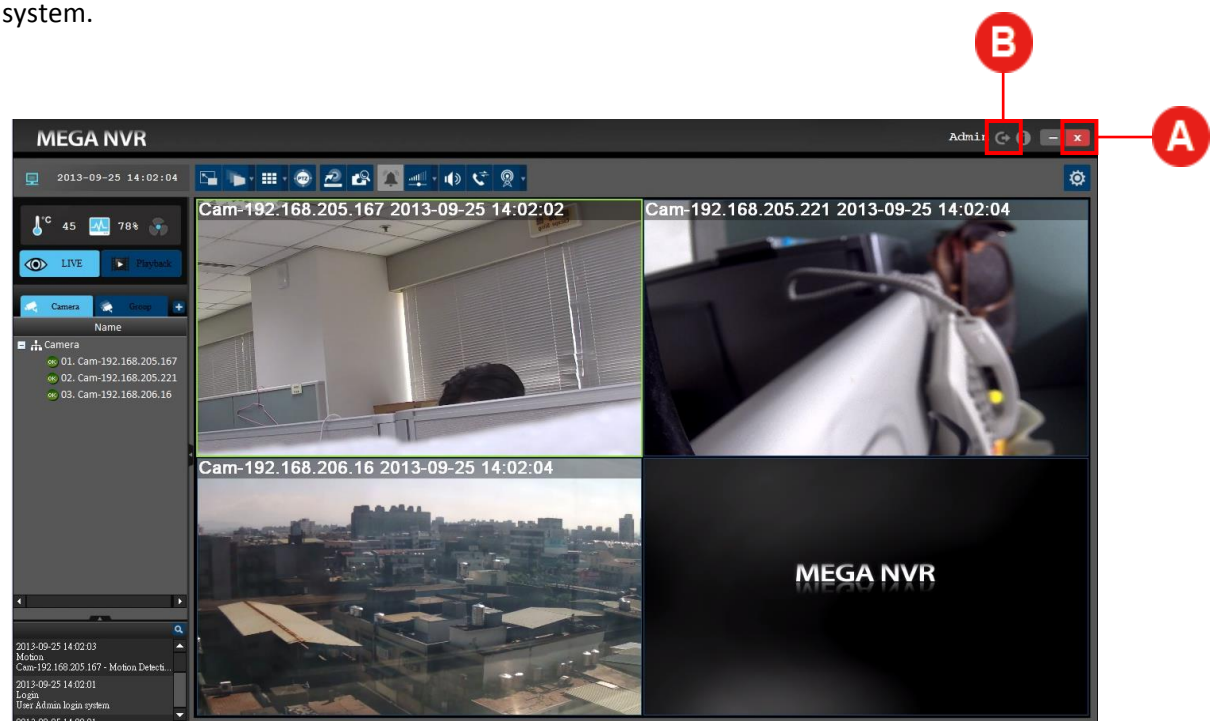


Figure 1-7a

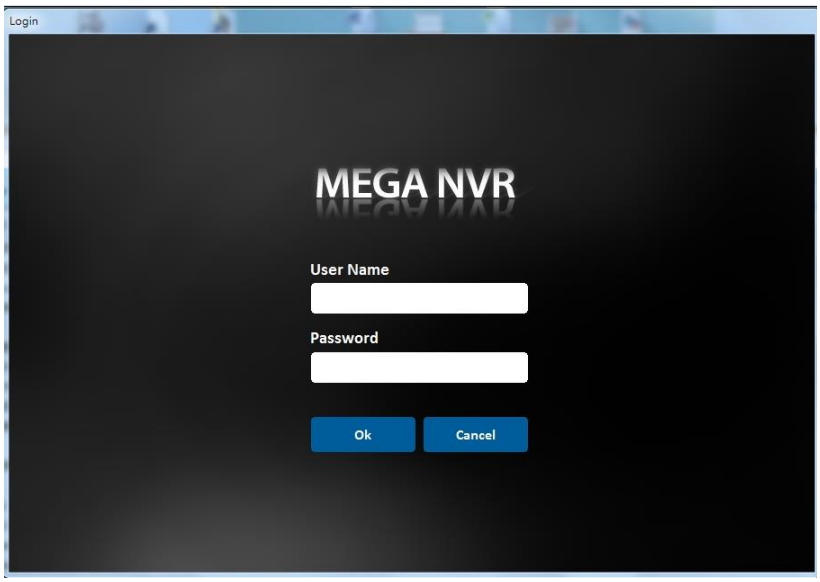


Figure 1-7b

2.5 Log Off and Switch Login User

In the main page of MEGA NVR software, click on the icon Switch User (Figure 1-7a, B), which is located at the upper right corner, a dialog box which is titled **Switch User** will be pop-up (Figure 1-8) and you will need an authorized account to exit system. In the **Switch User** dialog box, you may click the button Cancel to give up log off system.

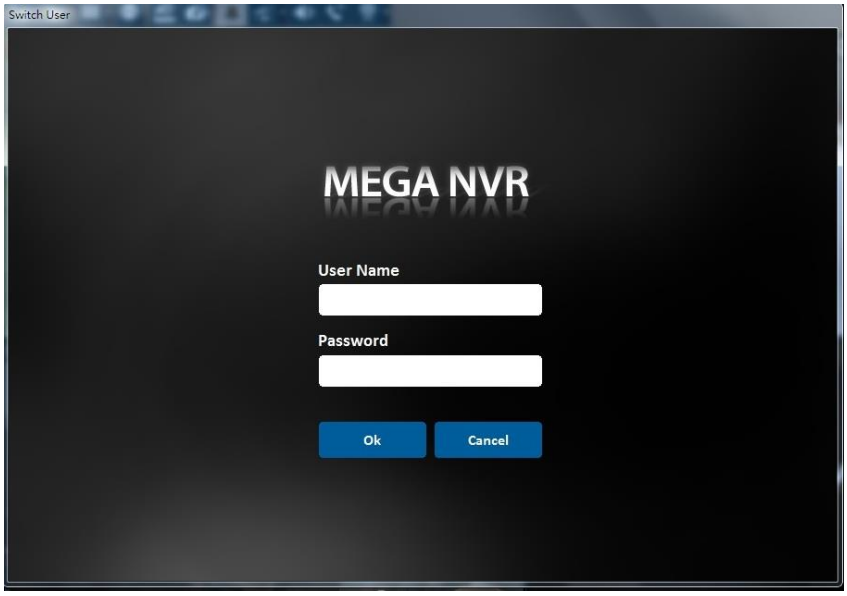


Figure 1-8

3 Live view

3.1 The Live View page

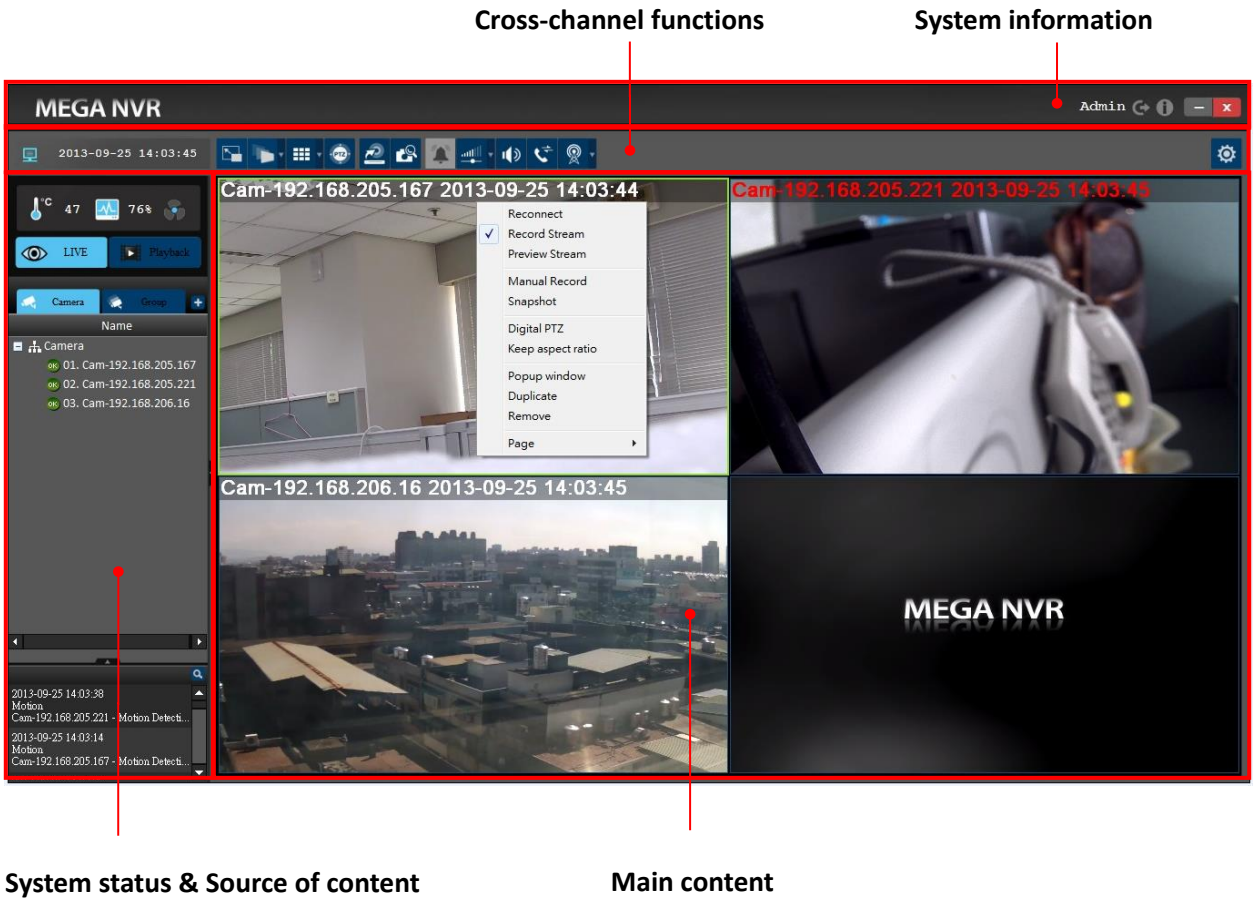


Figure 2-1

Users are able to monitor the real-time videos on the Live View page; users can also query the system event log, monitor the system Hardware status, or control PTZ (pan/tilt/zoom) of the speed dome cameras.

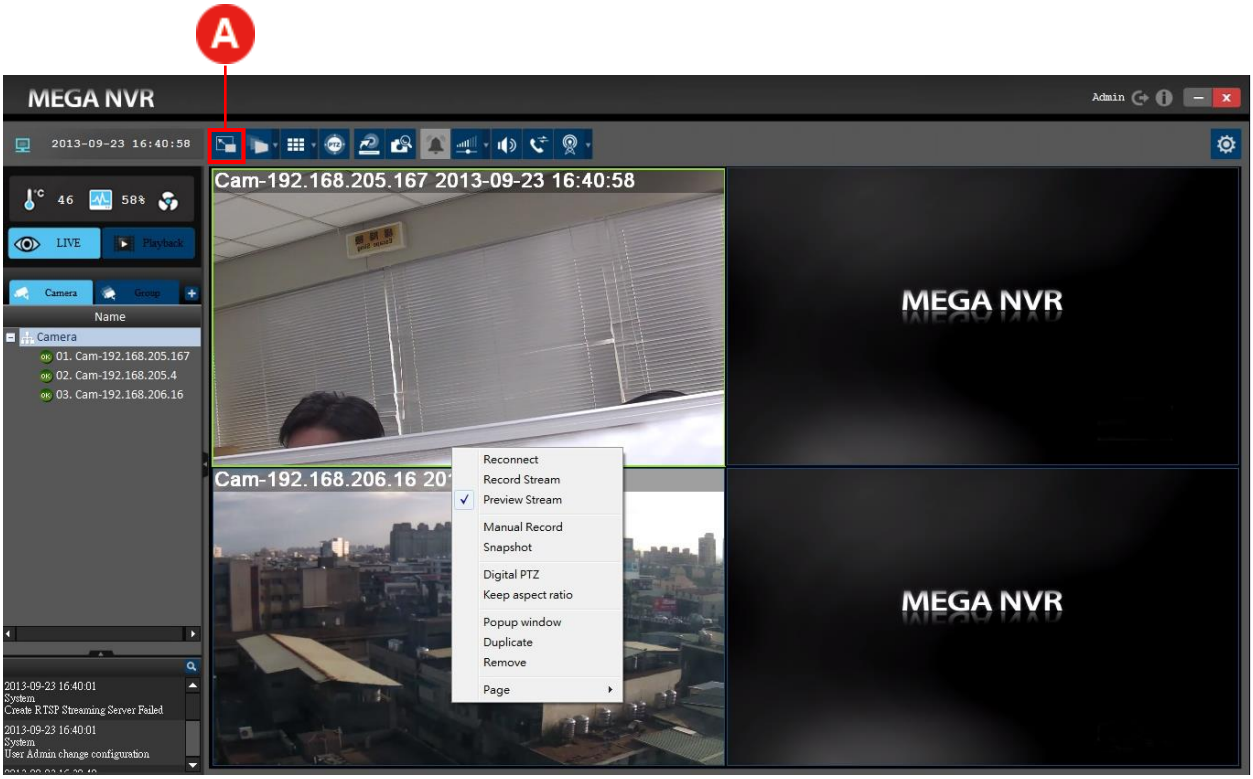


Figure 2-1a

(1) Double-clicking any video or click the icon will enlarge this channel into a single-cannel layout and re-double-clicking it will let the videos restore to the original layout. This feature is both provided in the Live View page and Playback page. (Figure 2-1a, A)

(2) To drag and drop the videos, users are able to re-arrange the channel display order.

(3) Real-time video snapshot：Move the mouse cursor to the upper left corner of any video window, the mouse cursor would become a “camera” icon and users are able to take snapshots by clicking the “camera” icon. Users are also able to open the “Snapshot Viewer” to browse the snapshots. To open the **Snapshot Viewer**, users may move the mouse cursor in any video window and click the right button of the mouse, and then select the “Snapshot Viewer” item. (Figure 2-1b, A)

Figure 2-1b

(4) Click the right button of the mouse on a channel's video window (Figure 2-1c), users are able to do other operations like：

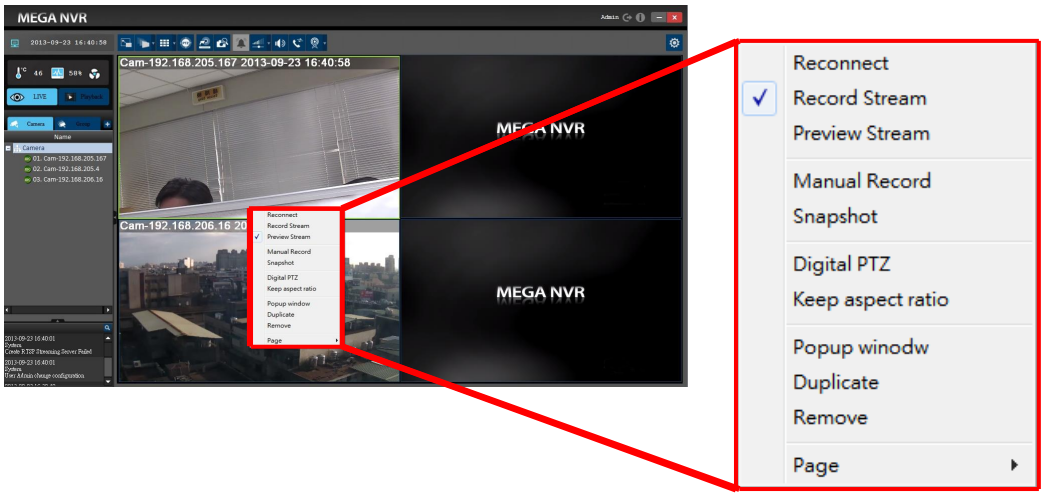


Figure 2-1c

- Reconnect：Manually reconnect this channel if there's trouble of video displaying.
- Record Stream：Display for record stream of this channel on live view
- Preview Stream：Display for preview stream of this channel on live view
- Manual Record：Users can manually start/stop recording despite of the current recording mode of that channel and search in the playback page. About the duration

of an event, it will be defined as the time span from the starting to the stopping of the manual recording.

- Snapshot：Snapshots browsing for all channels and all time
- Digital PTZ：Digital zooming
- Keep aspect ratio：Change the video displaying ratio to its original ratio rather than filling the video window
- Popup window：Users can select this item to open another pop-up video window for an important channel. Besides, all of the right-click functions mentioned above for the real-time videos are also available in this Popup window. (Figure 2-1d)

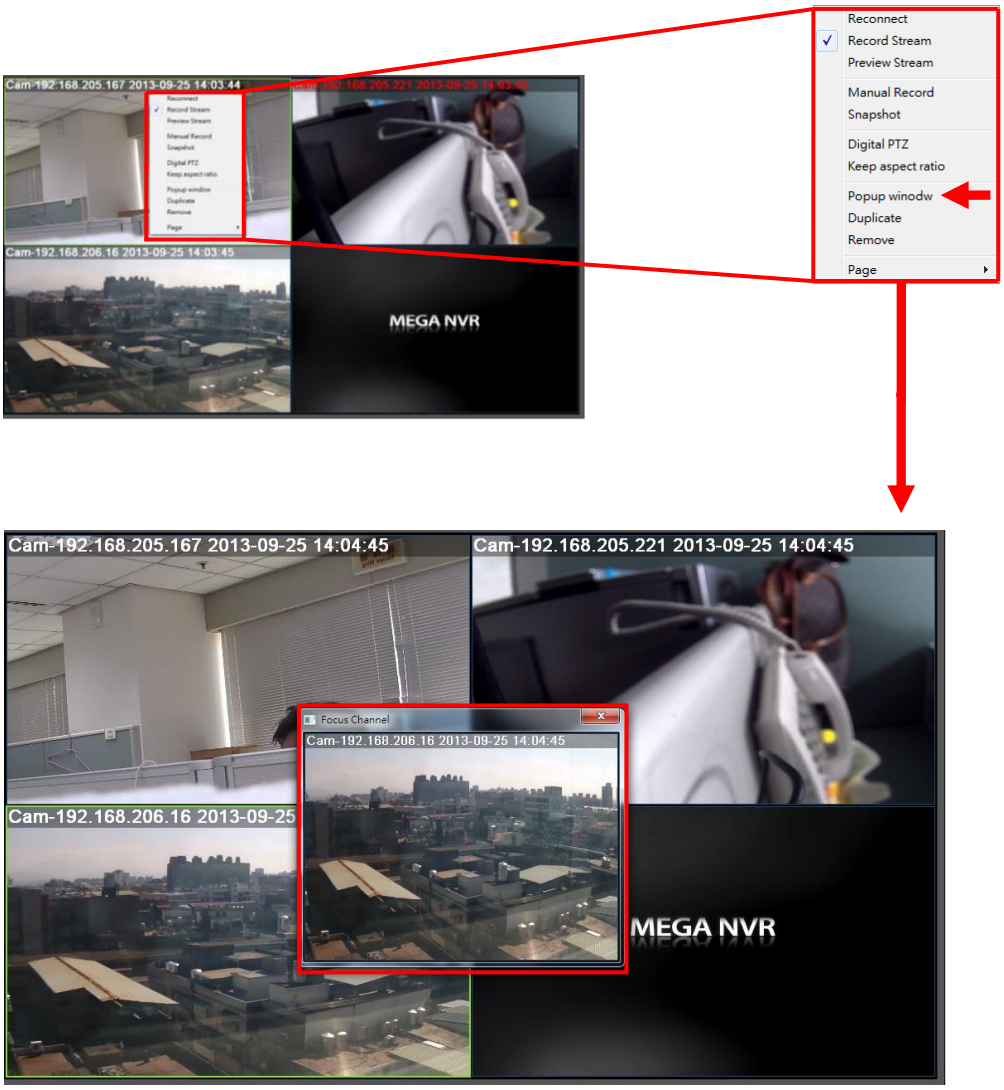


Figure 2-1d

- Duplicate：Duplicate a channel display on another one. (Figure 2-1e)

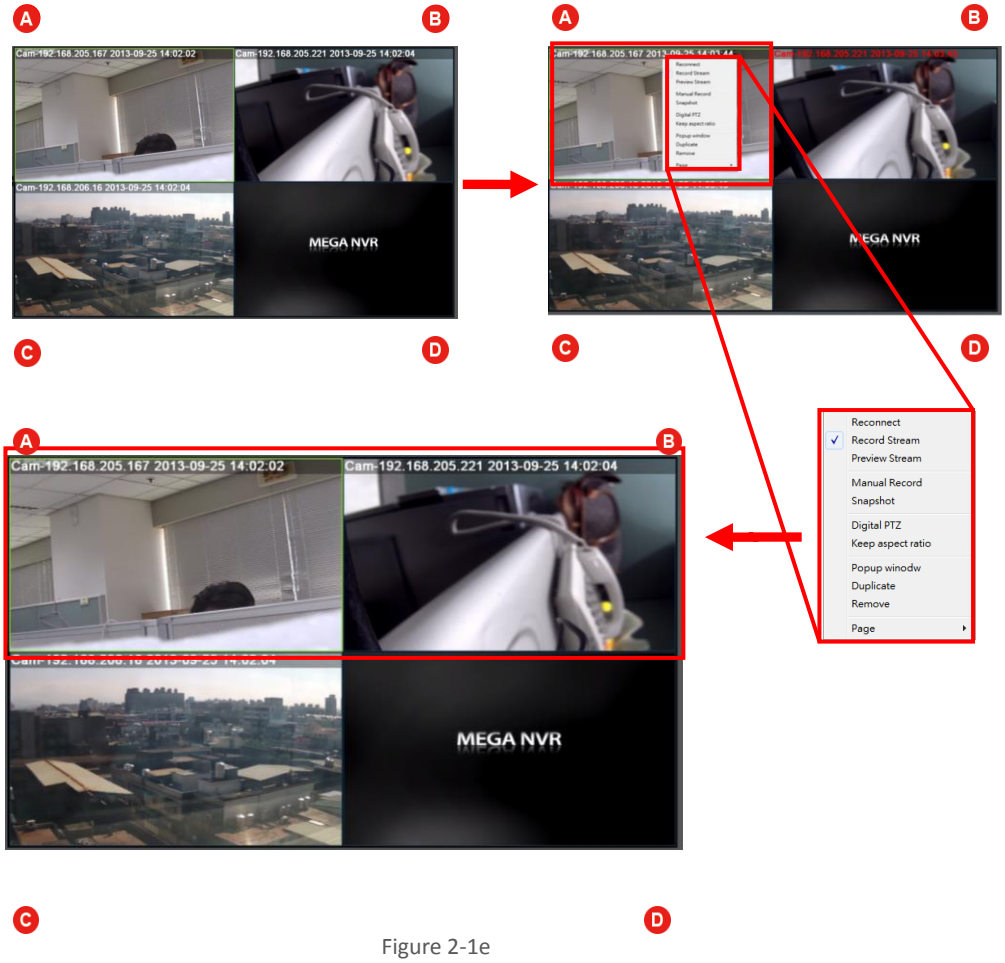


Figure 2-1e

- Remove：Remove the channel.
- Page：While the number of the real-time videos is more than the max. videos of the current video layout, the MEGA NVR system is capable to automatically paging these channels. For example, there's totally 30 channels user wants to display, but the layout user selected is 16, so all of the channels displayed will be divided into 2 pages, the page 1 is for channel 1 to channel 16, and the page 2 is for channel 17 to channel 30.

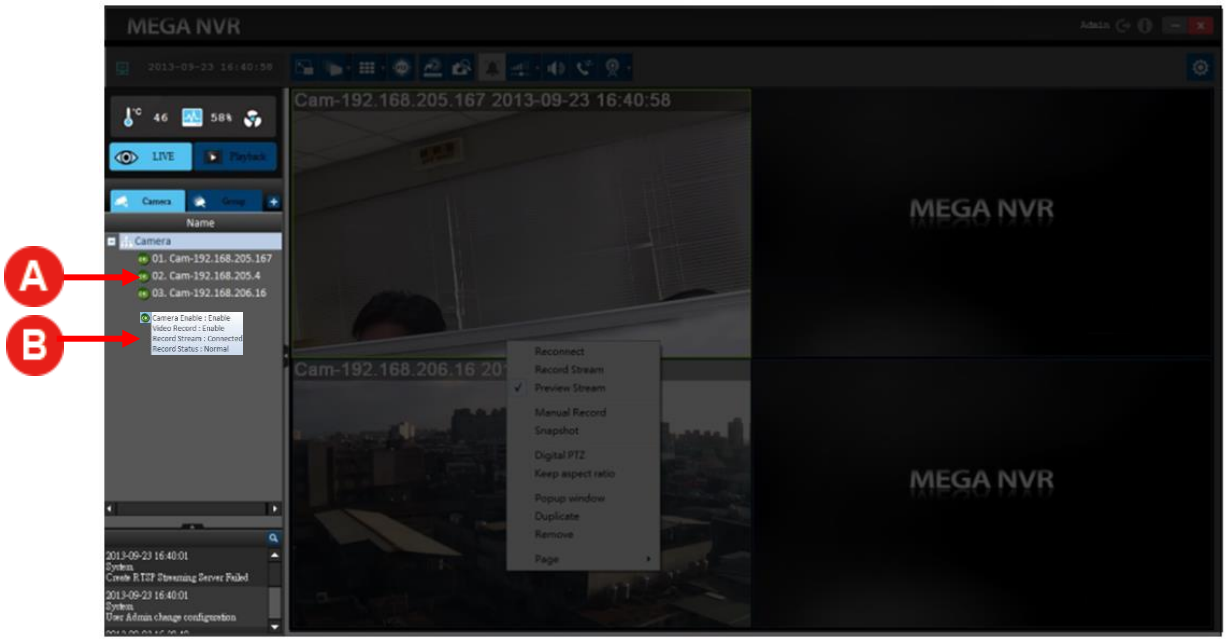


Figure 2-2a

- Camera list： Drag any camera in this list into the video display window and the camera's live video can be displayed instantly. An icon is located on the left of each camera name (Figure 2-2a, A), it would help users to aware the statuses of cameras. There are 3 kinds of status (Figure 2-5b) and users are able to click the icons to get more details about the cameras' statuses (Figure 2-2a, B):

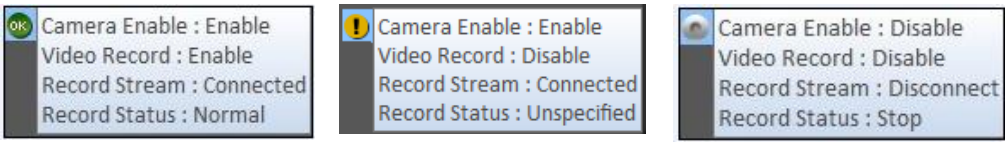

Camera Enable : Enable
Video Record : Enable
Record Stream : Connected
Record Status : Normal
Camera Enable : Enable
Video Record : Disable
Record Stream : Connected
Record Status : Unspecified
Camera Enable : Disable
Video Record : Disable
Record Stream : Disconnect
Record Status : Stop

Figure 2-2b

3.2 About the MEGA NVR System Version

In the Live View page of MEGA NVR software, click on the icon (Figure 2-3a, A), which is located at the upper right corner, a dialog box which is titled **MEGA NVR** will be pop-up (Figure 2-3b).

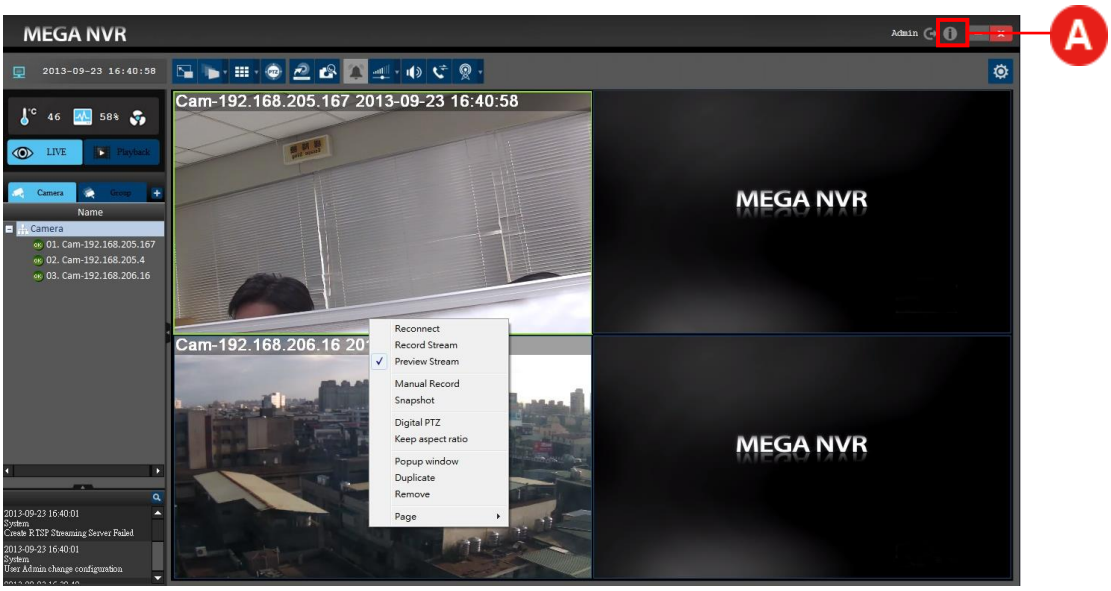


Figure 2-3a

Figure 2-3b

3.3 System Information

In the main page, a set of indicator about the system information is located at the upper left part of the Live View page (Figure 2-4). User are not only able to be informed the system temperature (A) and the CPU loading (B) but also be notified any abnormal speed of the system fans with a “RED” fan icon and an alarm sound from the system buzzer (C). User may configure for hardware monitoring in the Configurations -> **System** -> **H/W Monitor**.

Note：The status of fan will have notification once one of the system fans break down.

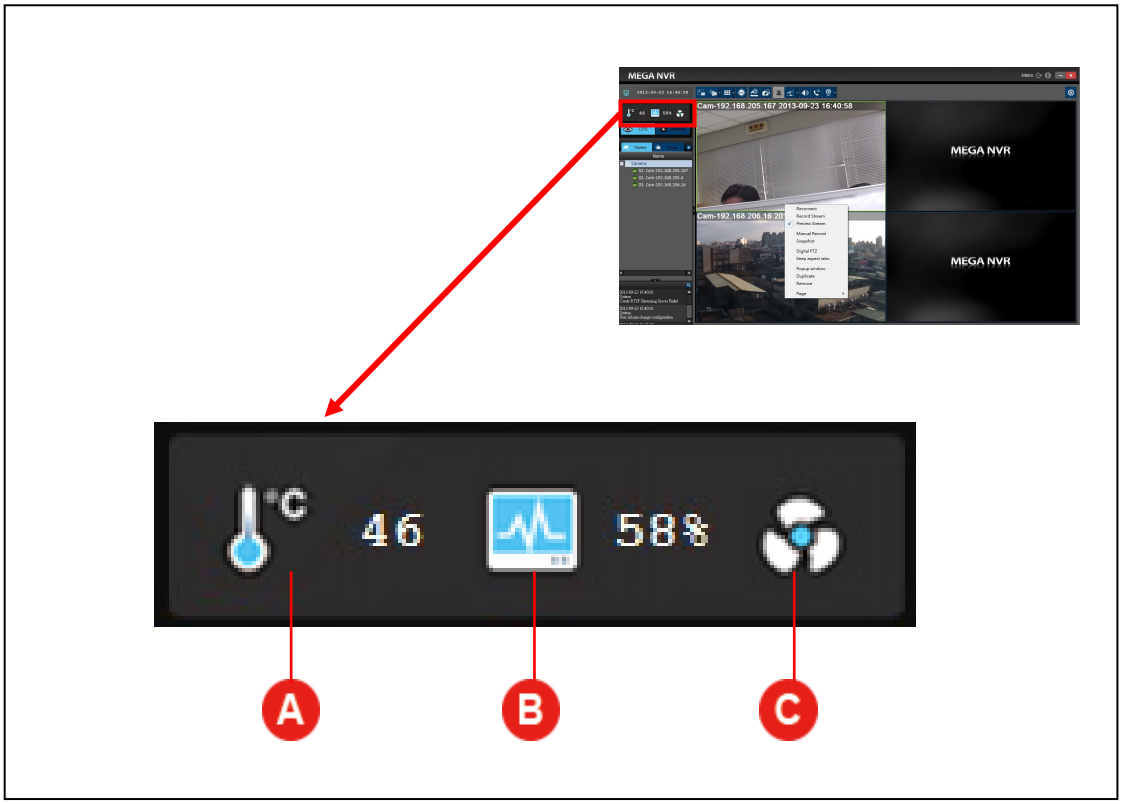


Figure 2-4

3.4 Two-way audio chat and broadcast control

Select a real-time camera video, click the icon (Figure 2-5, A), users are able to create a voice chat between the MEGA NVR system side and the selected camera side. If users are going to listen to the audio of this channel, just click the icon (Figure 2-5, B). If user wants to start audio broadcasting from client PC's microphone for multiple channels, please click on icon and then check on the channels you want to broadcast (Figure 2-5, C).

Note： Only one voice communicate function can be turn on at the same time and a specific icon (for "2-way audio chat", for "Audio Broadcast") will be shown at the lower-left Conner of the specific channel video.

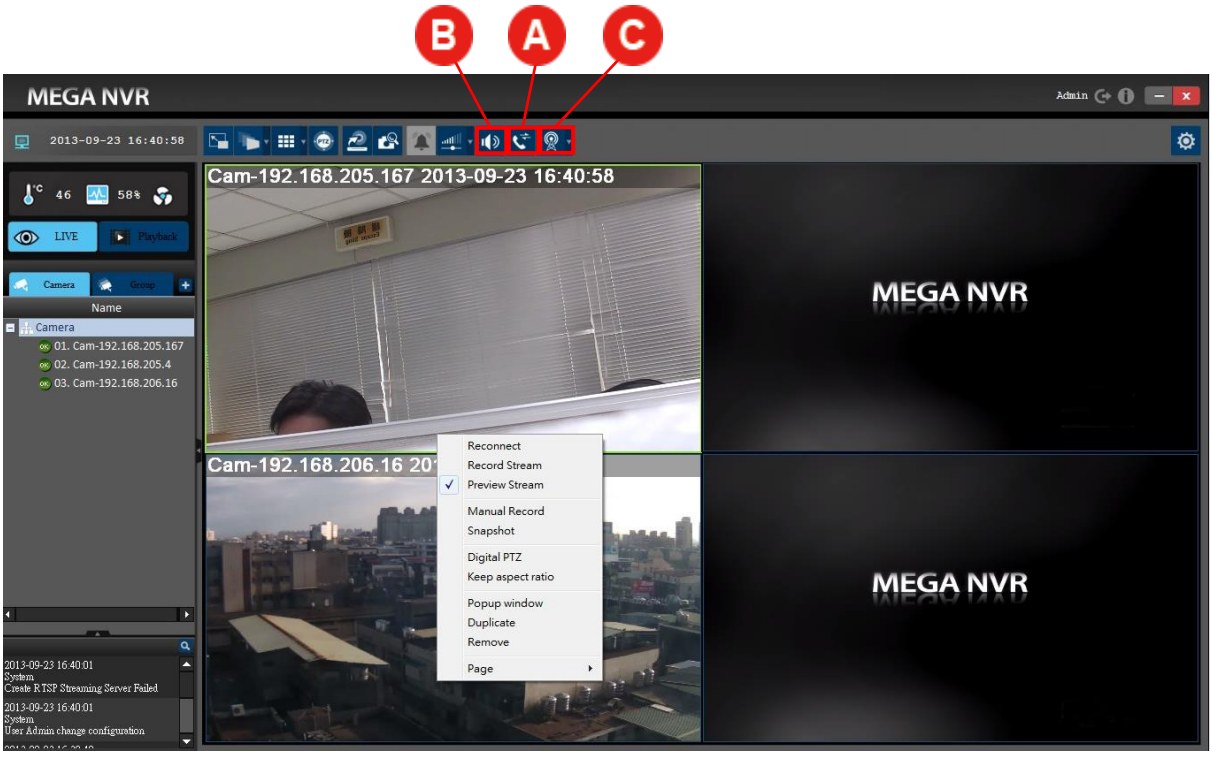


Figure 2-5

3.5 Digital Zooming

Select a real-time camera video, click the right button of the mouse, users are able to turn on / turn off the digital zooming function of the specific channel video by clicking the item, **Digital PTZ** (Figure 2-6, A). In the enabled mode of Digital PTZ (Zooming), a "**PiP (Picture-in-Picture) Window**" which is marked with a red border (Figure 2-7, B) will be shown at the lower-right corner of the specific channel video (Figure 2-6). This PiP Window intended to help users to know the relative position and size about the zooming window. Users can change the scale of zooming by scrolling the wheel of the mouse. Users are also able to change the displaying region by dragging and dropping the main window and the position relationship will be shown with a blue-border rectangle (Figure 2-7, C).

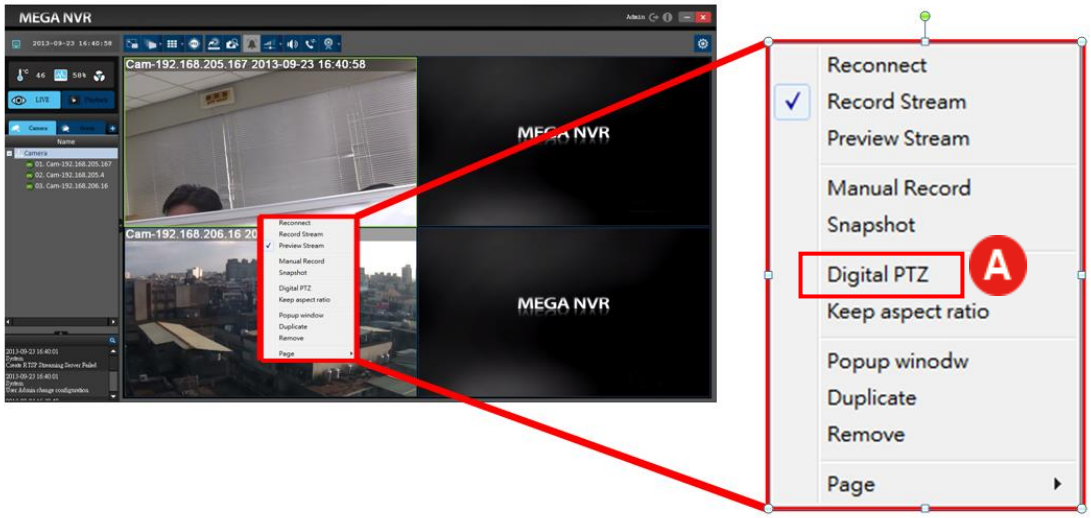


Figure 2-6

Figure 2-7

3.6 Snapshot Browsing

Select a real-time video and right click of the mouse, users are able to take a snapshot (Figure 2-8a, A) for the video and click the icon (Figure 2-8, B) to open a window to browse all manual snapshot images. Users are able to browse recorded files with a specific channel No. and time, (Figure 2-9). By double-clicking one of the thumbnails which are located at the lower-left corner of the **Snapshot Viewer**.

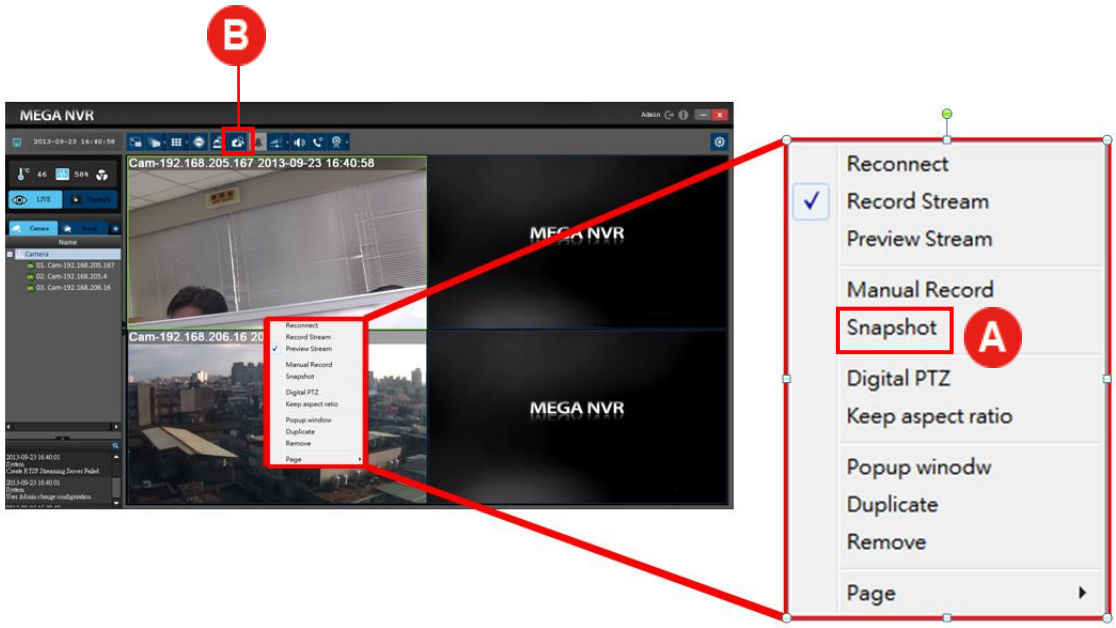


Figure 2-8 Figure 2-8a

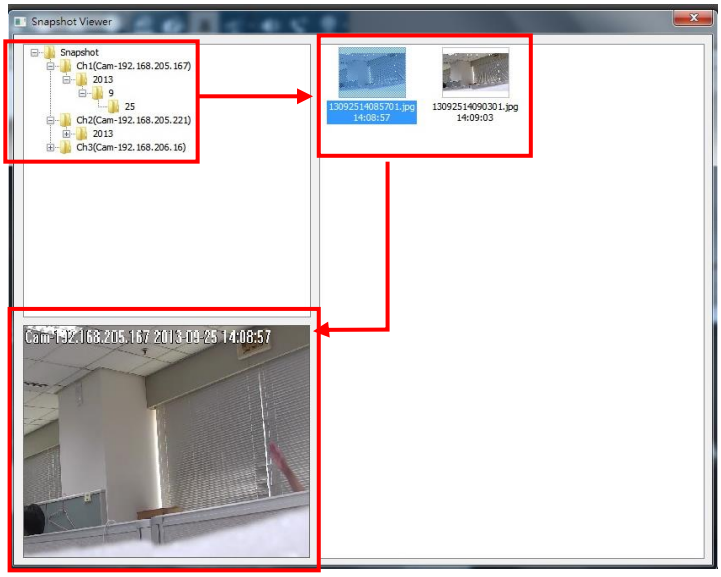


Figure 2-9

3.7 Speed Dome Camera Control

(1) In the Live View page, a set of control button for PTZ Controlling is provided (Figure 2-11) which is located at the top part of the Live View page (Figure 2-10, A). Users are able to control the direction, zooming scale, focus, preset positions, and the speed of speed dome cameras.

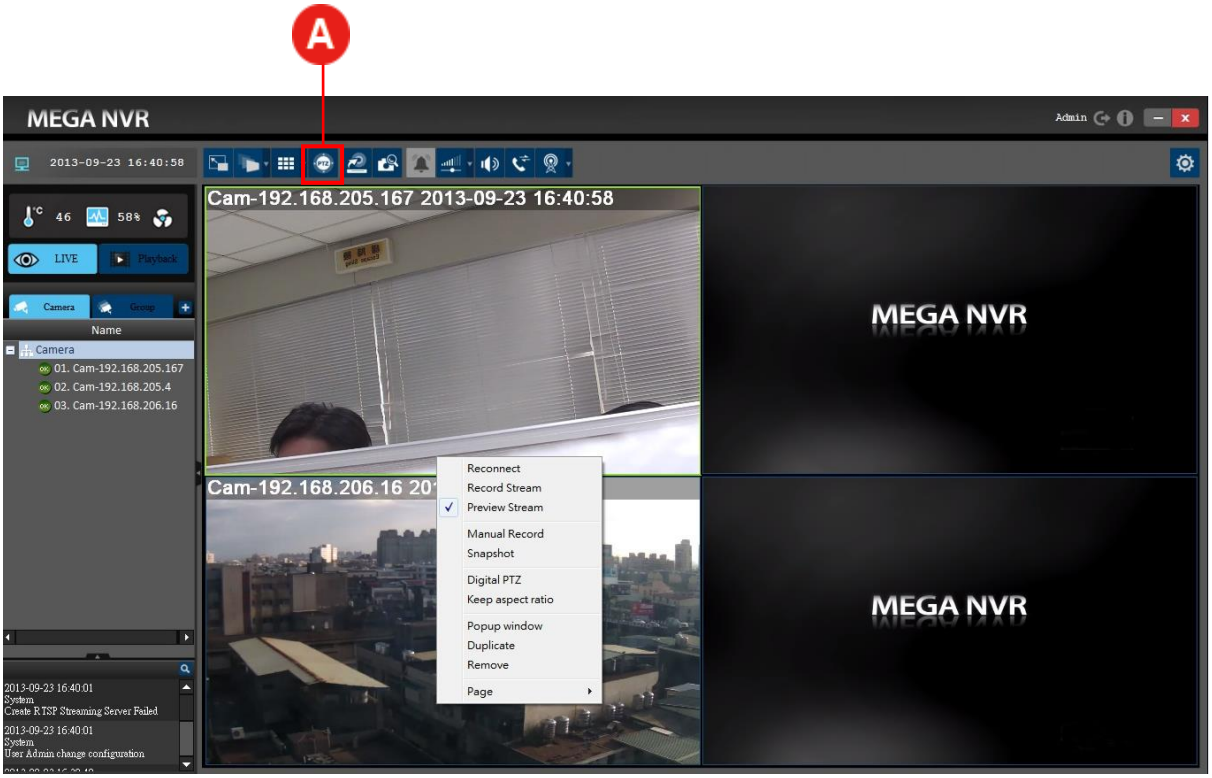


Figure 2-10

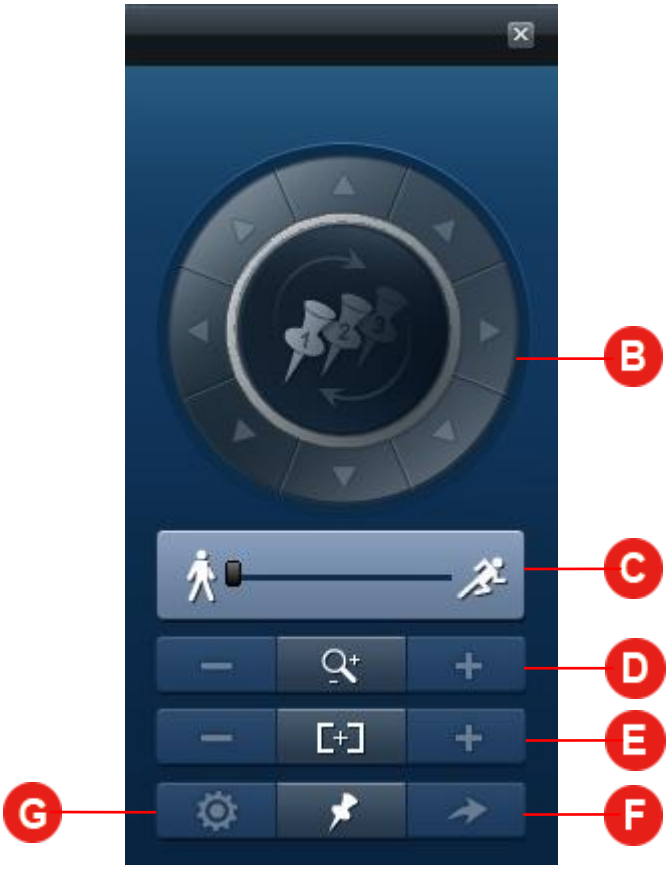


Figure 2-11

Ⓑ Direction：Pan and tilt in 8 directions and patrolling control.

Ⓒ Speed：The speed setting of moving for speed dome cameras, the right to accelerate and the left compared to slow down.

Ⓓ Zooming Control：Press the + icon can forward the scaling to reduce the monitoring region (Zoom-in), press the − icon can zoom back to enlarge the monitored area (Zoom-out).

Ⓔ Focus：Focus function of speed dome cameras, press the + icon is about the lens focal point closer to the − icon will be a focal point to pull away.

Ⓕ Preset Position： Press the ⚙ icon to setup a “Preset Position” (Figure 2-11, Ⓖ), press the → icon to move to a “Preset Position” (Figure 2-11, Ⓕ).

(2) The following steps will guide you to set the automatic cruise of the speed dome or cameras with a PT head：

A. Enable the PTZ control functions for a PTZ camera：

(A) Open the Configurations page.

(B) Select a specific Speed Dome Camera item in the IP Camera tree list.

Note： The speed dome camera will be listed under the node, "IP Camera", (Figure 2-12).

(C) Switch tab to **General**, and check the **PTZ Enable**.

(D) Users will also need to set the following setting for an "IP Camera"：
"Protocol", "Baud Rate", "Address ID", and "Home Position" (Figure 2-12).

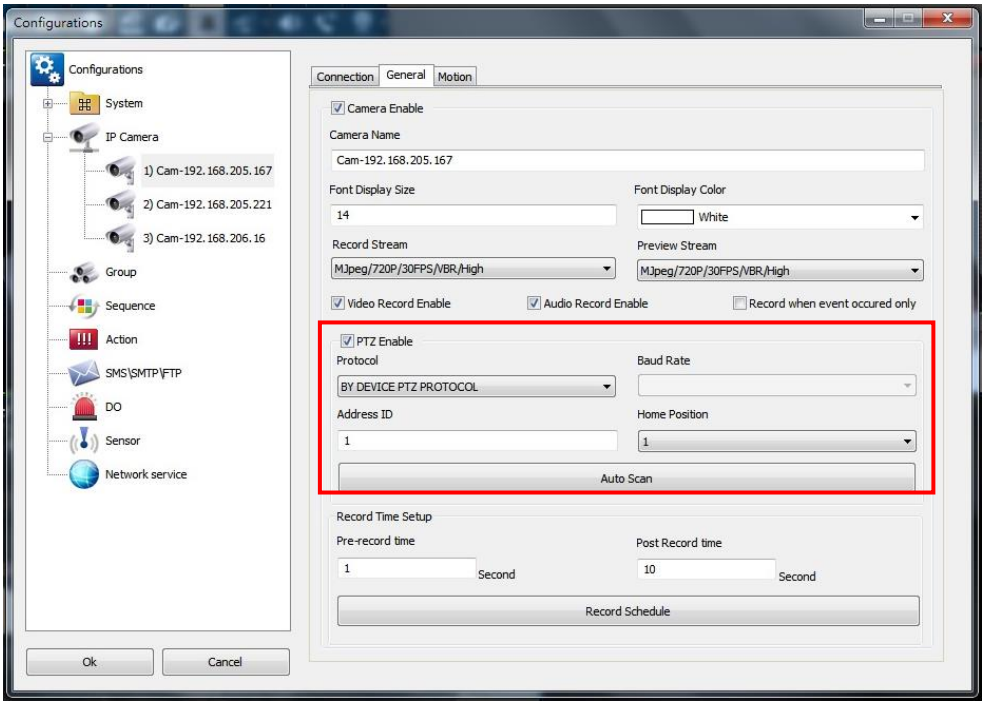


Figure 2-12

B. Setup the preset point (Figure 2-13)

(A) Click the PTZ icon which is located at the Live View page (Figure 2-13, Ⓐ).

(B) Adjust the PTZ angle of the cameras to focus at a specific range which you want to monitor. (Figure 2-13)

(C) Click on the set button ⚙ and a dialog box which is named "PRESET" will be pop-up. (Figure 2-13, Ⓑ)

(D) Select the "Preset" No. and input an appropriate description for the specific "Preset Position". Click the button [Set Preset] to setup a preset position or

click column “Descriptions” for updating descriptions for this preset point. (Figure 2-13, C)

(E) Click the button OK to complete the setting. (Figure 2-13, D)

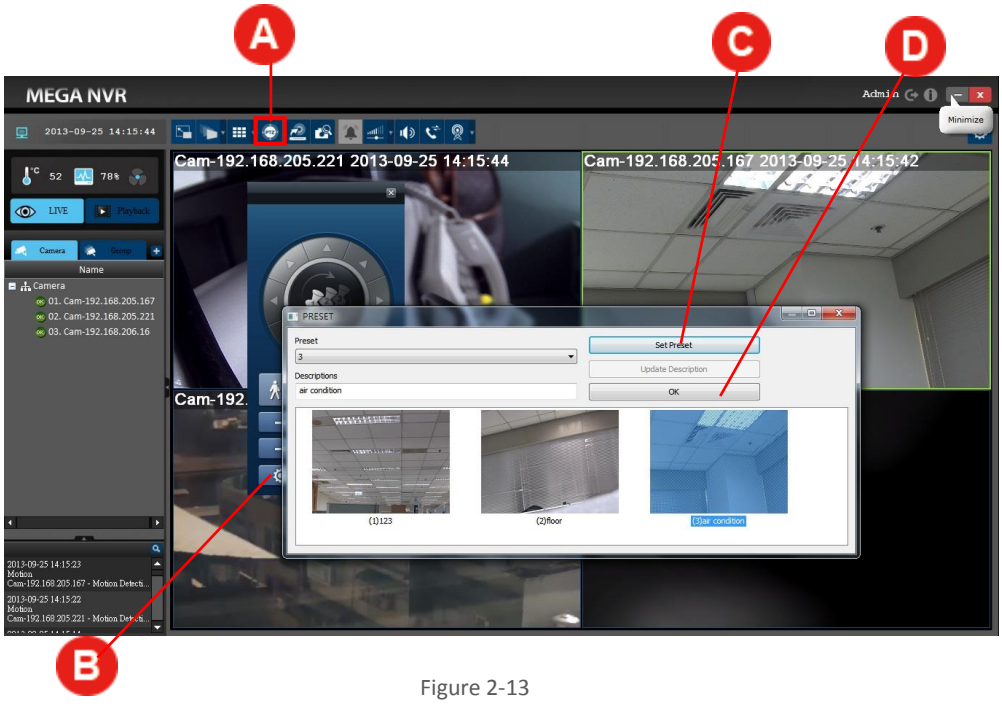


Figure 2-13

C. Setup automatic scan (patrolling)

(A) Open the Configurations page.

(B) Select a specific PTZ Camera item in the IP Camera tree list.

(C) Switch tab to **General**, and click the button Auto Scan and a dialog box **Auto-Scan Setting** will be pop-up.

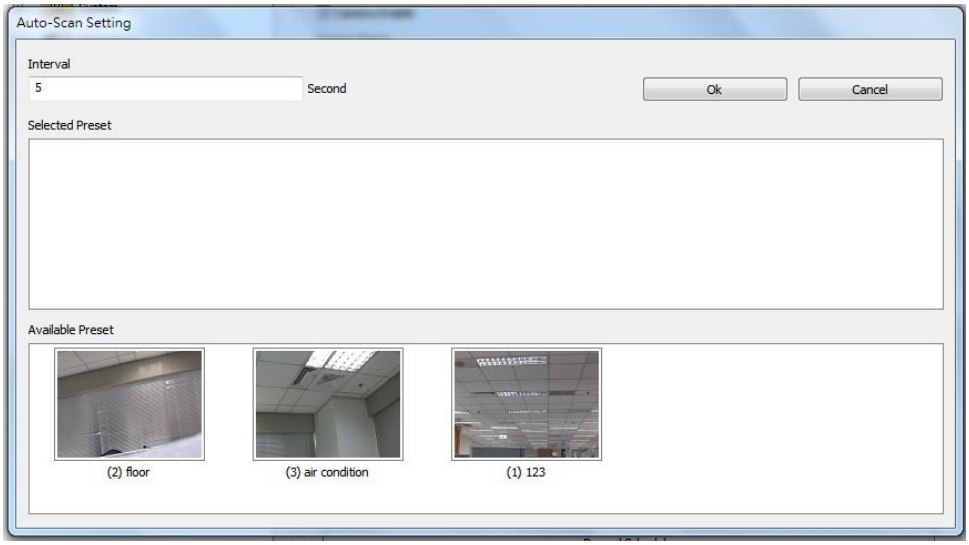


Figure 2-14

(D) In the Auto-Scan Setting dialog box, users can change the interval of scanning.

(E) Users are also able to drag and drop one or some preset position(s) from the **Available Preset** to the **Selected Preset**.

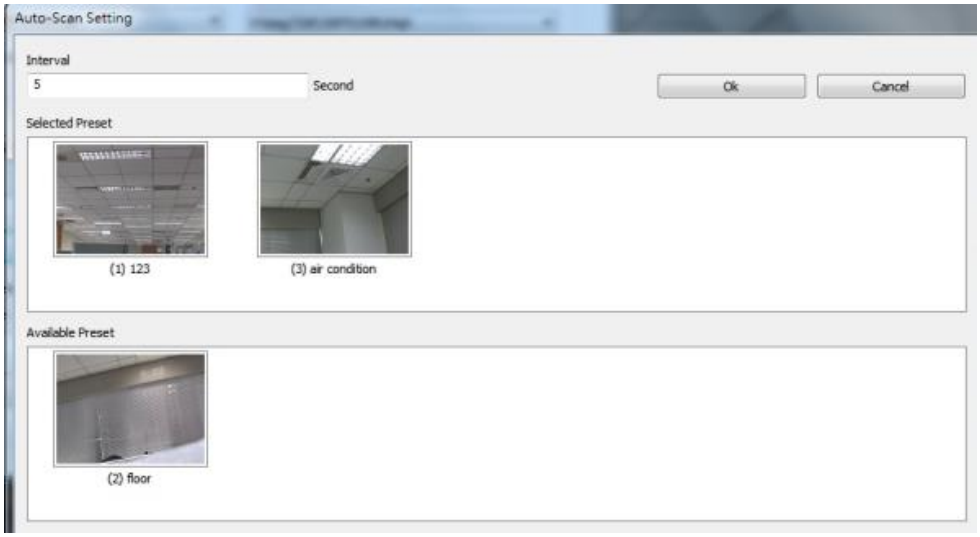


Figure 2-15

(F) After completing the above steps, click the OK button.

(G) You may start / stop the **Auto Scan** function by click the sequence button (Figure 2-16, A), which is located at the top part of the Live View page.

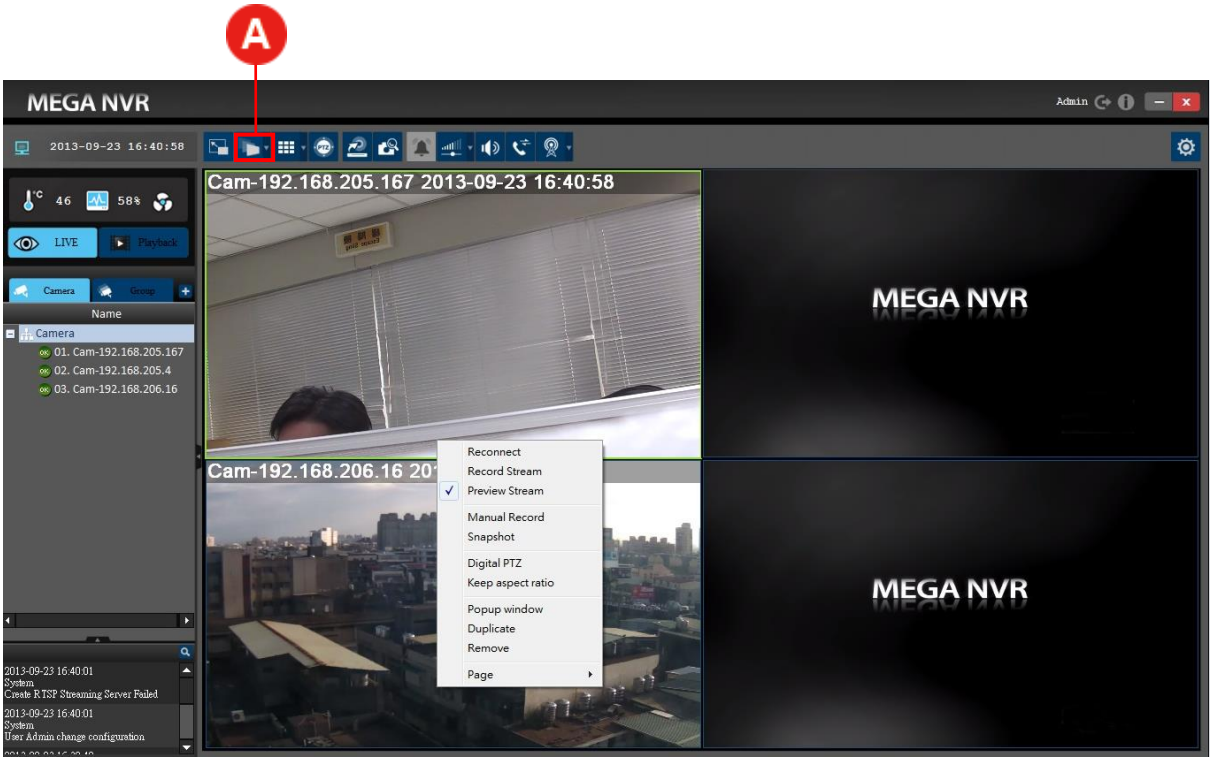


Figure 2-16

D. Screen Layout

In the main page, click the icon (Figure 2-17, A) to pop-up a layout box. Users are able to select a specific layout (1, 4, 8, 9, 16, and so on) in this layout box. Users can also set specific real-time channel video to "full screen", or change every video displayed by "group" or "sequence" playback.

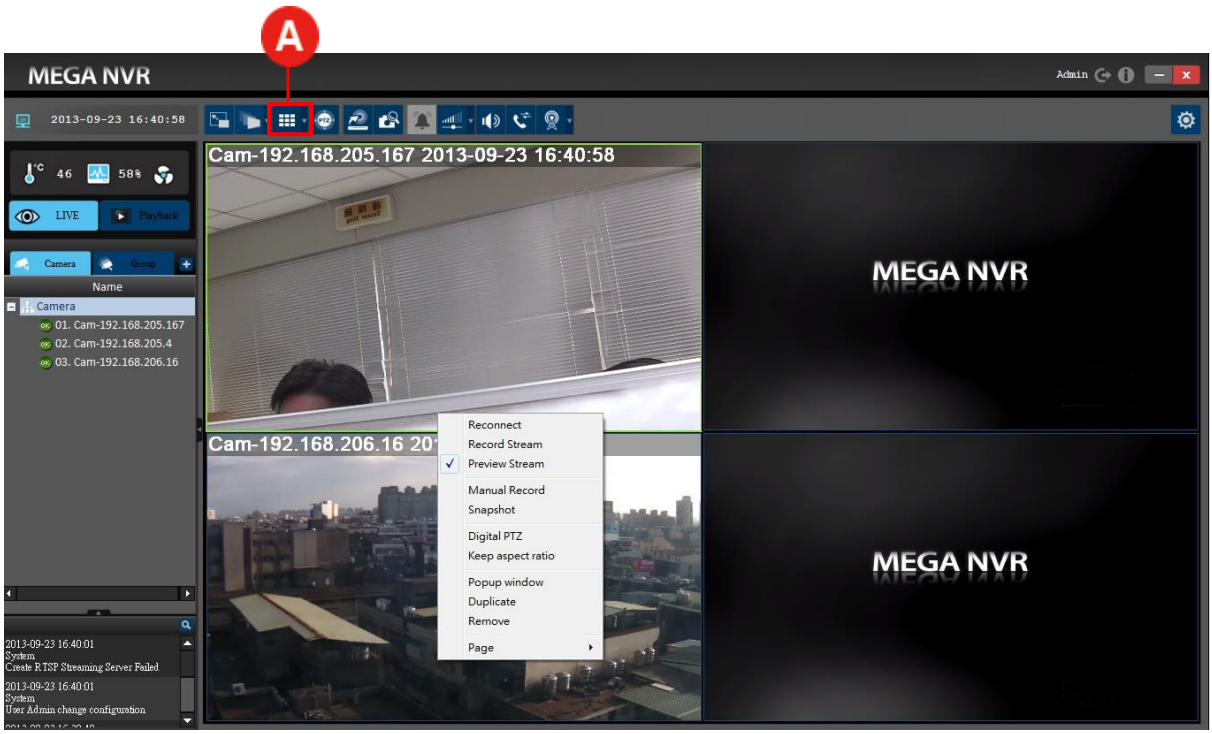


Figure 2-17

4 System Settings

4.1 System Configurations

Click the setup icon ( ) which is located at the Live View page (Figure 3-1, A) and a dialog window which is titled **Configurations** will be pop-up. Users are able to set system configurations as the following：

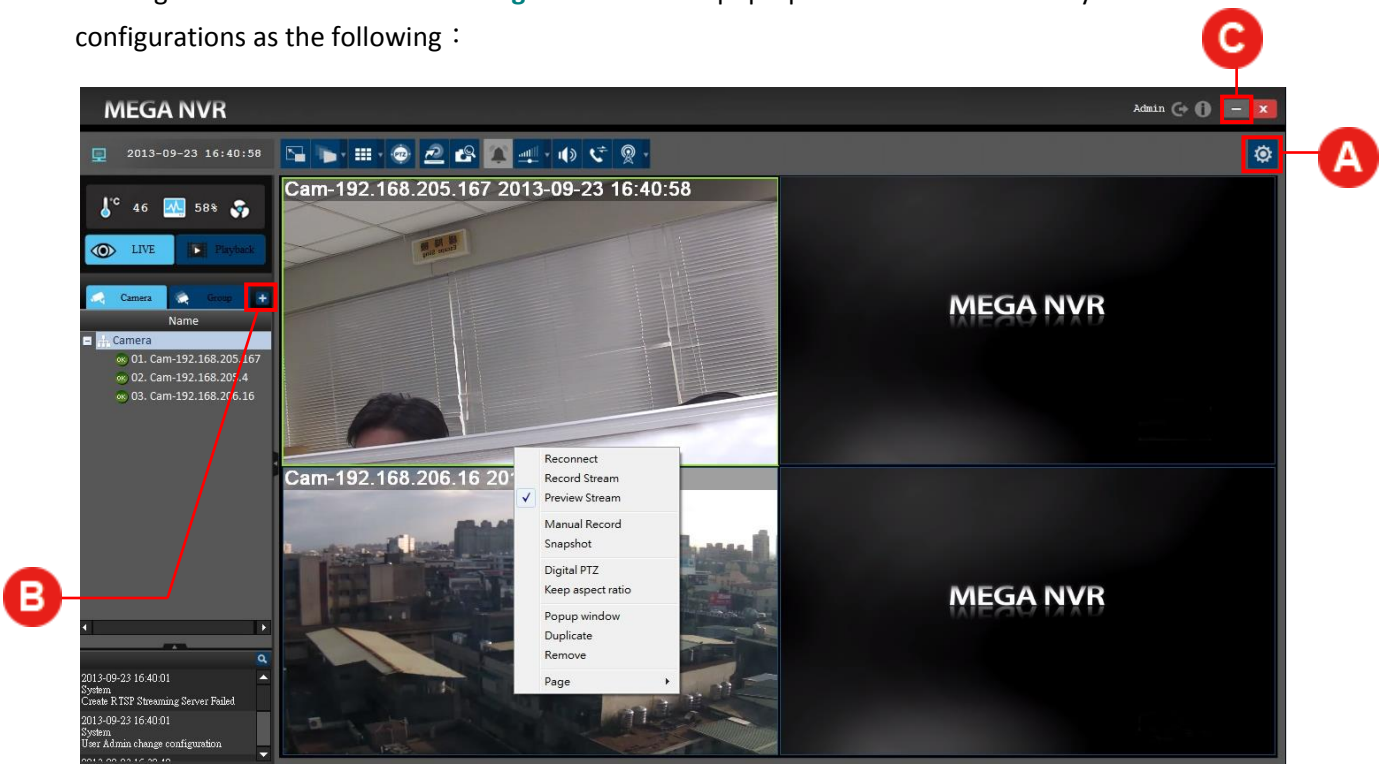


Figure 3-1

(1) Shutdown the system when program exit

Once this setting item has been checked, the computer system will be automatically shut down (power-off) after the program is exited.

Note：MEGA NVR System provides one watchdog solution, "Software Watchdog"：Software Watchdog：Once the MEGA NVR system has not responded or been terminated by any exception, as long as the operation system is still working, it will re-start the MEGA NVR system.

(2) Save Interval (Figure 3-2, Ⓓ)

This value defines the file length (in minute) of each video data file. The default value is 5 minutes and 8 types of length (1 / 3 / 5 / 10 / 15 / 20 / 25 / 30) are available. For example, if this configuration has been set to 3 minutes, the MEGA NVR system will create a new recording data file every 3 minutes (per each available channel).

(3) Auto Login (Figure 3-2, Ⓔ)

If this configuration is enabled, the MEGA NVR system will be login with the selected account after each starting of the operation system. The installation will automatically create a default account (with an "Administrative" permission) whose user name is "Admin" and the password is "1234", users will need to login with an authorized account and password at each system starting, if this configuration has not been checked.

(4) Enable Remote Reboot (Figure 3-2, Ⓕ)

If this configuration is enabled, any HTTP connection with the input password will trigger system rebooting for operating system. For example：

A. http：// MEGA NVR IP address {：Port Number} / Reboot.cgi
B. Input the correct password.
C. The operation system will be rebooted.

(5) Reboot (Figure 3-2, Ⓖ)： Users can configure the operating system of MEGA NVR to automatically reboot on a weekly day and time. If this configuration is enabled, please do not set any password for the default login account unless you do not want the MEGA NVR system be automatically logged in after the MEGA NVR system rebooting.

Note：

The configuration of "Watch Dog" is not available in the MEGA NVR software.

Any change in this Configurations Page won't be saved until the button OK ***has been clicked.***

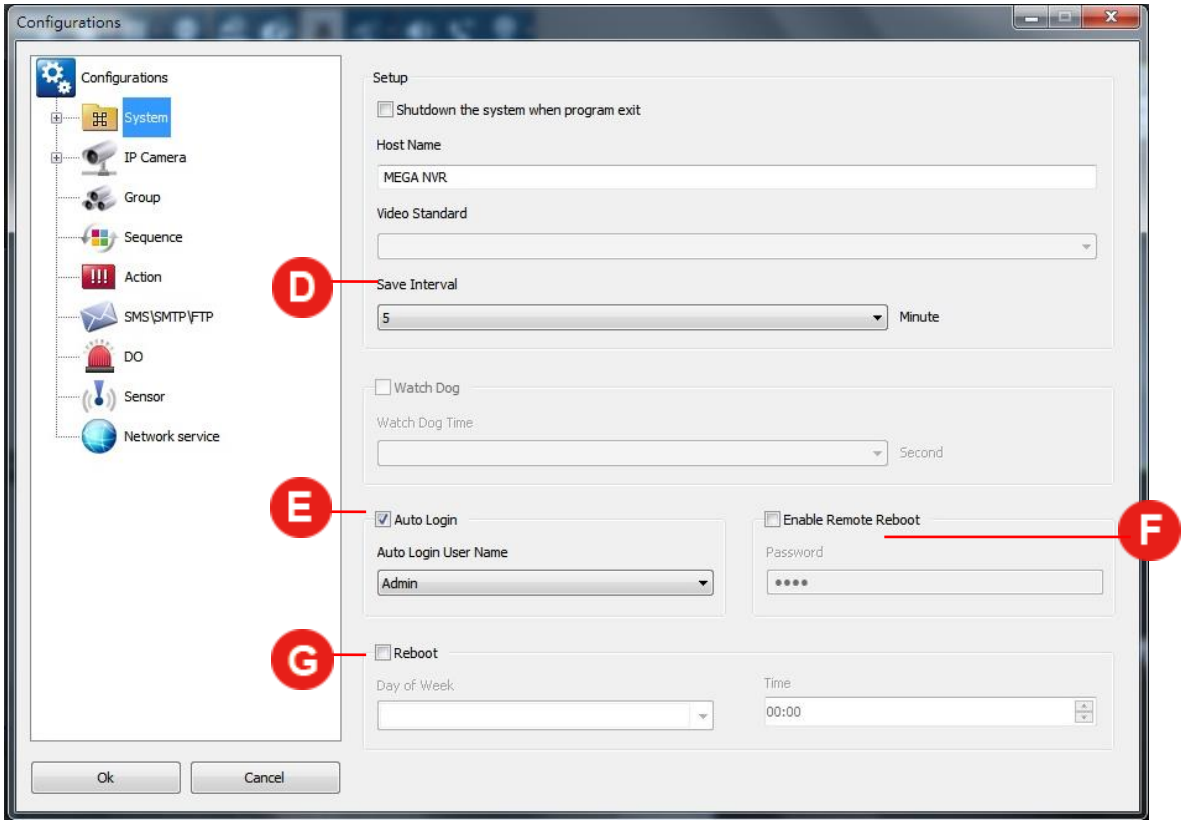

Configurations
Configurations
System
IP Camera
Group
Sequence
Action
SMS\SMTP\FTP
DO
Sensor
Network service
Setup
Shutdown the system when program exit
Host Name
MEGA NVR
Video Standard
Save Interval
5
Minute
Watch Dog
Watch Dog Time
Second
Auto Login
Auto Login User Name
Admin
Enable Remote Reboot
Password
Reboot
Day of Week
Time
00:00
Ok
Cancel
D
E
F
G

Figure 3-2

4.2 Storage Settings

To add, modify, delete storage setting groups for streaming data file. Instructions：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click **System / Storage** in the tree view item, (Figure 3-3) to adjust the following configurations：

(1) Ⓐ Max. Event Record Days

The number of days (1～365) for the video recording files saving. Once any recording file has been kept longer than the duration user set, it will be deleted automatically by the MEGA NVR system.

(2) Ⓑ Snapshot folder

The folder for saving snapshot pictures.

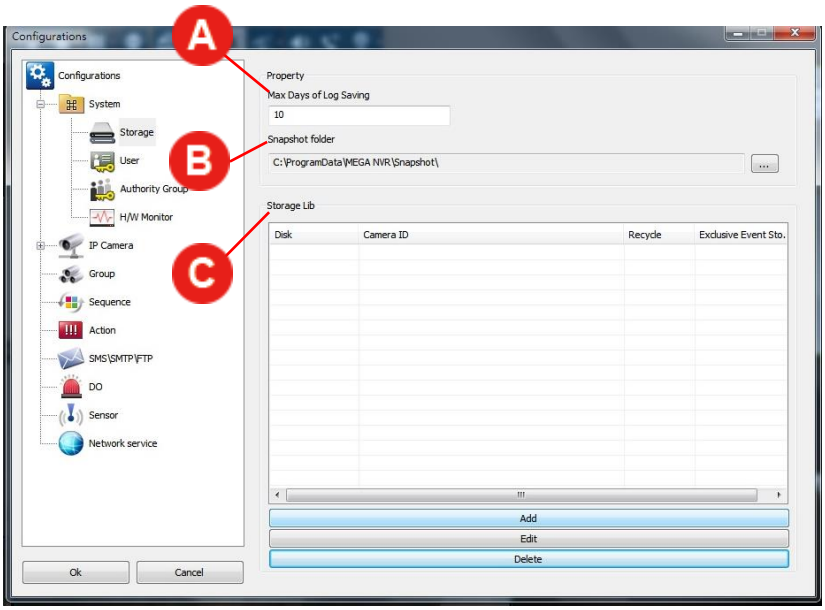


Figure 3-3

(3) Ⓒ Add Storages

- Storage Media Setting：Set a path for recording data files saving. To click the Add button, a dialog box **Storage Device** will be pop-up (Figure 3-4). To check the items of the **Storage table** to assign partitions to be storages and to check the items of the **Information table** to assign cameras' streaming to be stored in this storage group.
- Recycle：If this item is checked, once the available spaces of the storages are less than the settings value, the older recording files will be deleted automatically by the MEGA NVR system with the deleting unit of one hour. (Figure 3-4, Ⓐ).

- Storage Only for Event Clip：If this item is checked, the recording files would be only saved while any event occurred. (Figure 3-4, B)

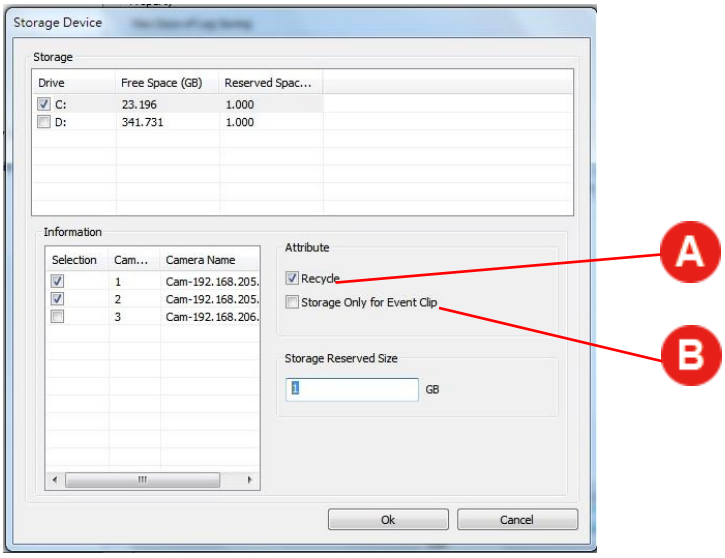


Figure 3-4

(4) Modify Storages

Select one of the **storage device** in the **Storage Lib** (Figure 3-3, C) which you want to modify, and then click the Edit button, a dialog box **Storage Device** will be pop-up (Figure 3-4). Modify the settings (just like the “Instruction (3)： Add Storages” described) and click the OK button finally to apply settings.

(5) Delete Storages

Select one of the **Storage Device** in the **Storage Tab** which you want to delete, and then click the Delete button, a confirm dialog box **Storage Device** will be pop-up (Figure 3-4). Just click the Yes button to process the deleting or click the No button to back the last page.

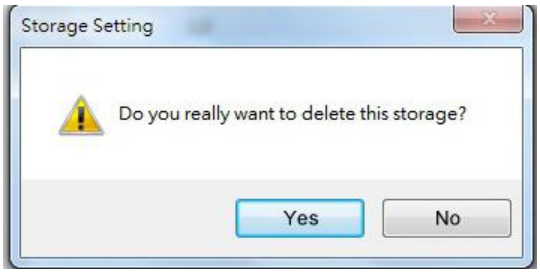


Figure 3-5

Note：For each camera which is enabled to record, please make sure that each camera is assigned with proper storages.

4.3 User Account Management

To add, modify, delete “User” and “Authority Group”.

Instructions：

It is recommended to create some authority groups before creating users, and then assign users to the specific authority groups. To do these, you will need to click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click ***System / Authority Group*** in the tree view item, (Figure 3-6) to adjust the following configurations：

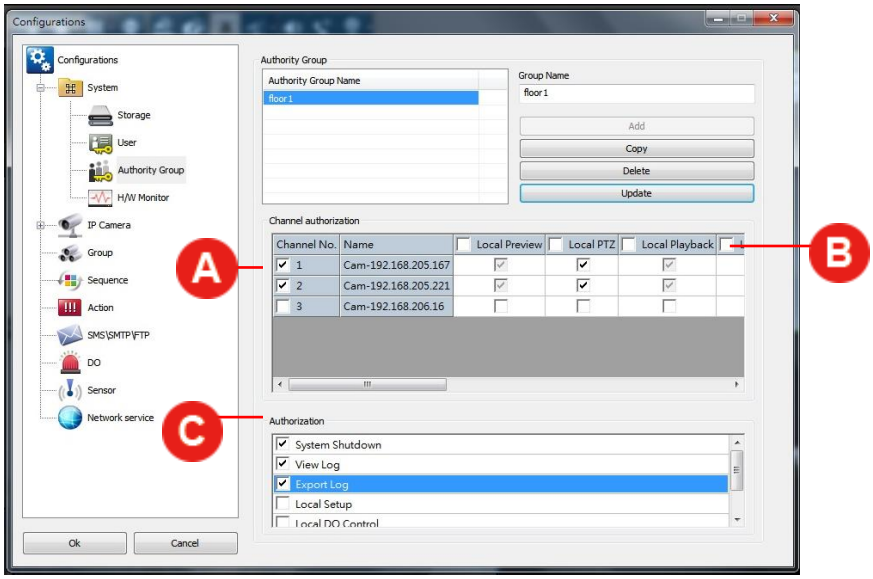


Figure 3-6

(1) Add Authority Groups

The Authority Groups can be regarded as the classification of user privileges; users can achieve permissions management through inheritance from different Groups. Once the permissions of an Authority Group are changed, the permissions (channel permissions, system privileges) of all the users that inherited from the Authority Group are also changed.

If a specific Authority Group is deleted, all the users that inherited from the Authority Group are also deleted unless there is any the user has been assigned with any individual permission and it will be remained.

There is a special Authority Group, which is named “Supervisor” and it has been already created by the MEGA NVR system, which won’t be listed in the “Authority Group” page but the “Authority Group” of the “User” page.

To create / modify an Authority Group, please refer to the following steps：

A. Enter the “Name” for the Group in the “Group Name” field.

B. Set Permissions for Channels – In the “Channel authorization” table, users are able to assign permissions independently for each channel. The permissions include：

   (A) Local Preview：Be authorized to open the local real-time video. This permission is required to browse the local snapshot pictures.

   (B) Local Playback：Be authorized to operate the local playback.

   (C) Local PTZ：Be authorized to operate the local PTZ controlling. The permission of “Local Preview” is required to authorize this permission.

   (D) Remote Preview：Be authorized to preview the video this channel remotely. The right of browsing snapshot remotely will also be granted.

   (E) Remote Playback：Be authorized to operate the playback remotely.

   (F) Remote PTZ：Be authorized to operate the PTZ controlling remotely. But the permission of “Remote Preview” has to be granted first in order to enable this permission.

   (G) Local Data Export：Be authorized to local export data (Recording data backup, save snapshot, print snapshot, saving video as AVI files). But the permission of “Local playback” has to be granted first in order to enable this permission.

   (H) Remote Data Export：Be authorized to export data (Recording data backup, save snapshot, print snapshot, saving video as AVI files) remotely. But the permission of “Remote playback” has to be granted first in order to enable this permission.

   Note： Users are able to check all the permissions by checking the check box which is nearby the channel number (Figure 3-6, Ⓐ). Users are also able to check all the channels to grant a specific permission by clicking the check box which is near by the permission (Figure 3-6, Ⓑ).

C. Set Permissions for System – In the **Authorization** table (Figure 3-6, Ⓒ); users are able to grant permissions for the MEGA NVR system operating. The permissions include：

   (A) System Shutdown：Be authorized to exit the MEGA NVR system.

   (B) View Log：Be authorized to browse the event log of the MEGA NVR system.

   (C) Export Log：Be authorized to export (saving as, printing) the event log of the MEGA NVR system.

   (D) Local Setup：Be authorized to change the configurations of the MEGA NVR system.

   (E) Local DO Control：Be authorized to control the digital output devices of the MEGA NVR system.

   (F) Remote Setup：Be authorized to change the configurations of the MEGA NVR system remotely.

(G) Remote DO Control：Be authorized to control the digital output devices of the MEGA NVR system remotely.

D. Duplicate Authority Groups

If you want to create an Authority Group which is similar to any existing Authority Group, you can duplicate a new Authority Group from the existing one first, and then modify the settings for the new one. The steps as the following：

(A) Tap the existing authority group you want to duplicate.

(B) Enter a new name for the new Authority Group in the **Group Name** field.

(C) Click the button Copy, and a new Authority Group would be successfully created (duplicated).

(D) Tap the new Authority Group which is just been created, adjust the permission settings of channels and system.

(E) Click the button Update to complete and apply the operation.

E. Update Authority Groups

To modify an existing Group, the steps as the following：

(A) Select the item which is to be modified first

(B) Adjust the permission settings of channels and system.

(C) Click the Update button to apply the setting.

(2) Add a user (Figure 3-6) Admin

Each user must be inherited at least from one Group (or more than one Group). All of the inherited permissions are granted (union operation) and cannot be removed. A user is not only granted with inherited permissions but can also be granted with non-inherited permissions. Non-inherited permissions can be granted or removed to any users. The inherited permissions do not affect the non-inherited permission unless the user is operating actions which involved non-inherited permissions.

A. Enter the Basic Information of User (in the **Base Data** tab) (Figure 3-7, Ⓐ)

(A) User Name：The name of account. Alpha letters, numbers, special symbols (1～50 characters) are accepted.

(B) Password：The password of account, 1～50 characters are accepted.

(C) E-Mail：The e-mail address of the user.

(D) Phone number / Mobile Phone Number：Only numbers (0～30 characters) are accepted.

(E) Once you complete the above items, please select at least one **Authority Group** in the **Authority data** tab, and then click the Add button to create a new account. (Figure 3-8, Ⓑ)

(F) You can select an account which is listed in the table **Authority Information** (Figure 3-9, C) and then modify settings for updating.

(G) You can also select an account which is listed in the **Authority Information** table and click the button Delete to delete it.

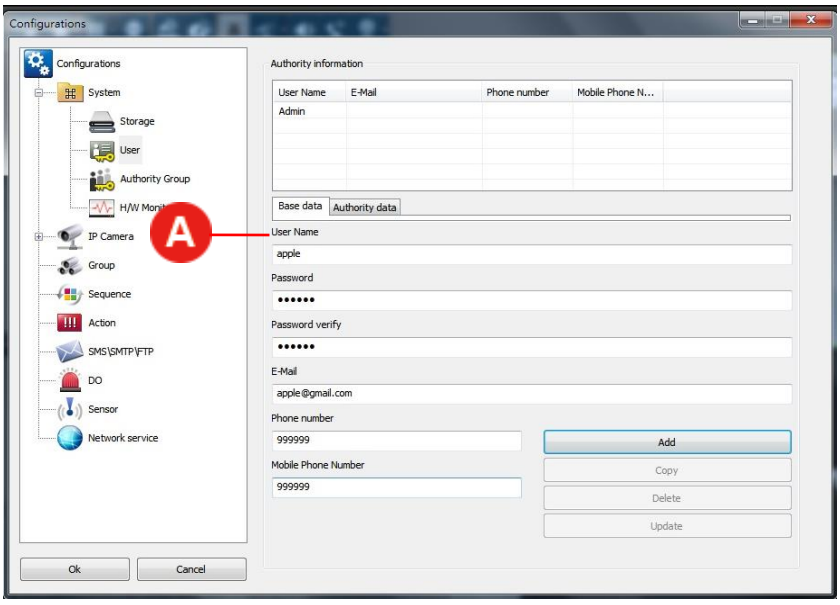


Figure 3-7

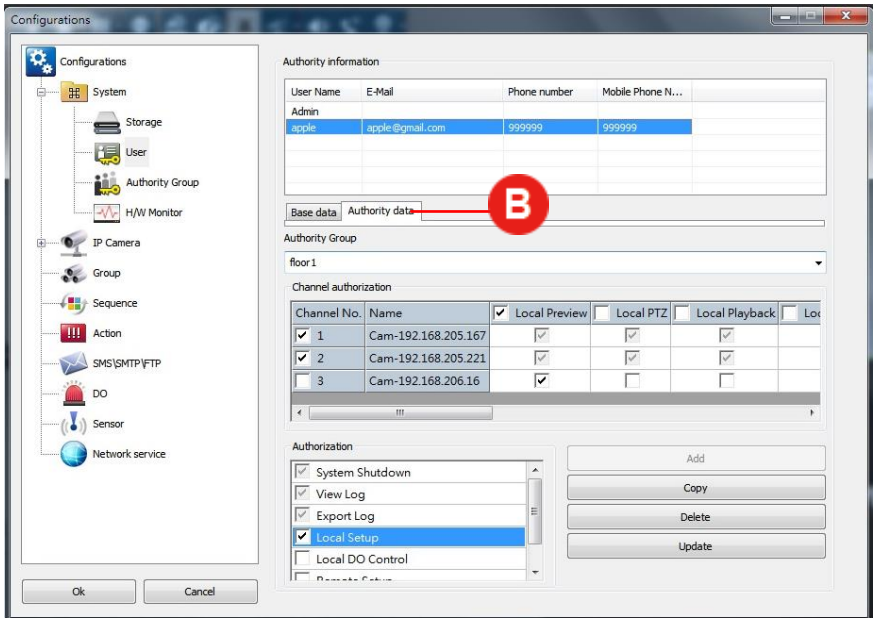


Figure 3-8

B. Set Information of Permissions

(A) Select inherited permissions of Authority Group

Check one or more (at least one) Authority Group from the **Authority Group**. (Figure 3-9, D).

(B) Grant additional non-inherited permissions

Check the non-inherited permissions from the **Channel Authorization** (Figure 3-9, E) and **Authorization**. (Figure 3-9, F).

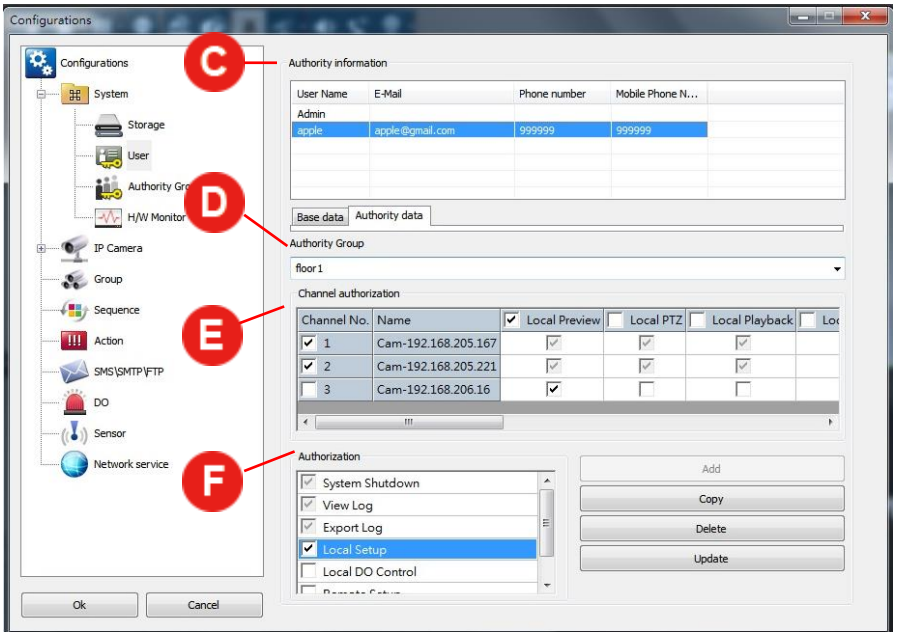


Figure 3-9

(C) Duplicate accounts

If you want to add a new account by copying permissions and other settings from an exist account, you may select the account which you want to duplicate and modify the user name and finally click the button Copy to complete the account-duplicating.

(D) Delete accounts

Select the user which you want to delete and click the button Delete, and then click the button Yes in the confirmation dialog box (Figure 3-10) to confirm the deleting.

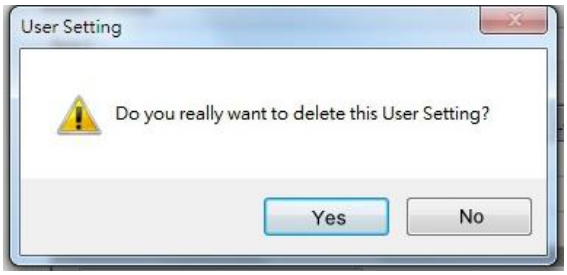


Figure 3-10

(E) Update accounts

Select a user which is to be updated, modify the information and click the button Update to apply the change.

4.4 Hardware Monitoring

The MEGA NVR system provides monitoring of the CPU temperatures and fan status.

Instructions：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click the tree view item, **System / H/W Monitor** (Figure 3-11), to adjust the following configurations：

(1) Max CPU Temperature：The high-temperature warning for CPU. The default value is 80. (Figure 3-11, A)

(2) Temperature Unit：Celsius or Fahrenheit. (Figure 3-11, B)

(3) Fan Speed：If this item is checked, the system will automatically get real-time speed of the fan; (Figure 3-11, C)

(4) System Fan Monitor：If this item is checked, the MEGA NVR system will alert users while any speed of fan is less than the setting value. (Figure 3-11, D)

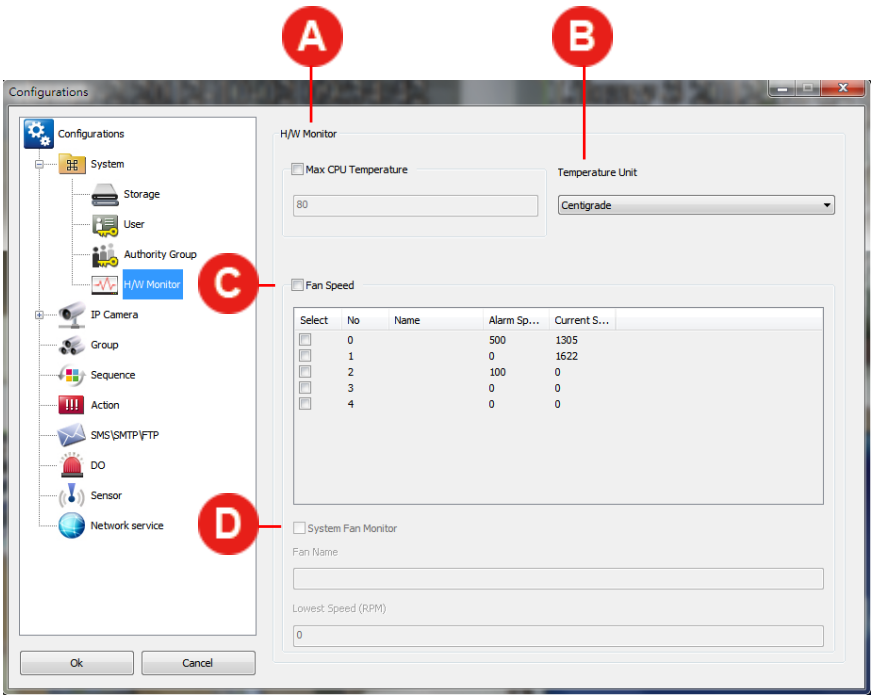


Figure 3-11

4.5 IP Camera Management

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click the tree view item, **IP Camera** (Figure 3-12), to adjust the following configurations：

(1) Manually add an IP camera (Figure 3-12)：

- Ⓐ Model：Specify a proper model.
- Ⓑ Channel / Camera ID：The MEGA NVR system will automatically assign these two items.
- Ⓒ IP Address：The IP address for the connected IP camera.
- Ⓓ Camera Name：A name or description for the IP camera.
- Ⓔ Account / Password：The account and password for the IP camera.
- Ⓕ After complete the above items (Ⓐ to Ⓔ), users are able to get the profile of the specific camera by click the button Get IP Camera Profile.
- Ⓖ Record Stream / Preview Stream：Select proper properties for the record stream and preview stream. The values of properties would be just noted as “Stream 1” / “Stream 2” unless users click the Get IP Camera Profile.
- Ⓗ Specify a proper storage for the IP camera.
- Ⓘ Finally, click the Add IP Cameras to apply the above settings.

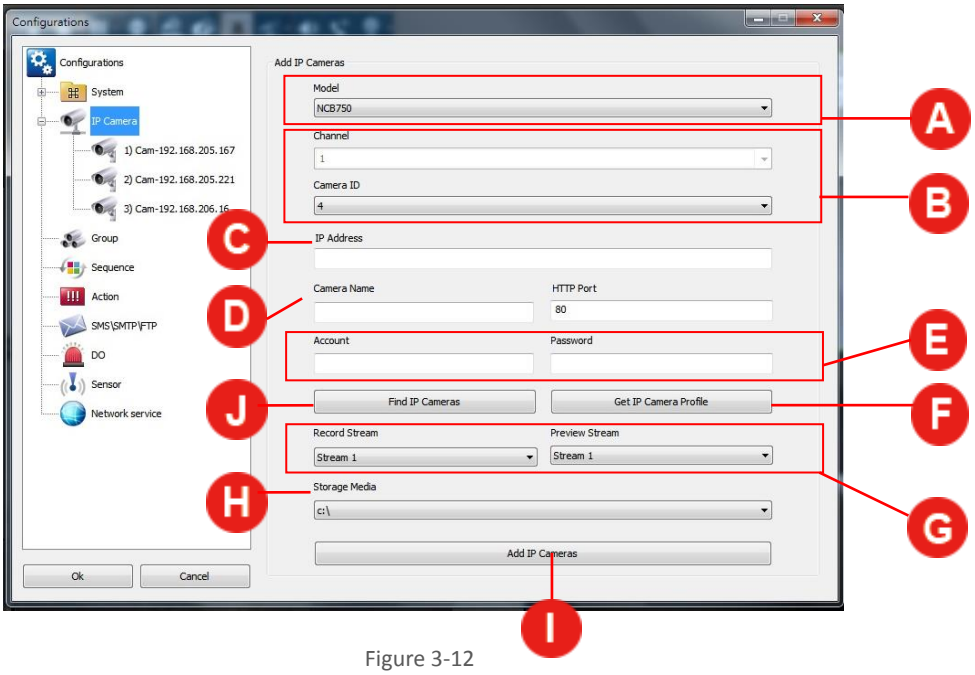


Figure 3-12

(2) Automatically **Find IP Cameras**：

A. Click on the Find IP Cameras (Figure 3-21, J) button, a wizard named **Add Camera** will be started. The wizard is able to help users to easily discover cameras which are connected to the network. To start the discovery, just click the icon (Figure 3-13, A). After few seconds, any available camera will be listed in the table. By checking the corresponding check-box, users can not only add them to be a managed IP camera but also specify the default setting of **Recording** (Figure 3-14).

B. In each step of this wizard, users are able to click the icon to switch next page, click the icon to back to the previous page, click the icon to cancel and close the wizard, or click the icon to finish the wizard and apply changes.

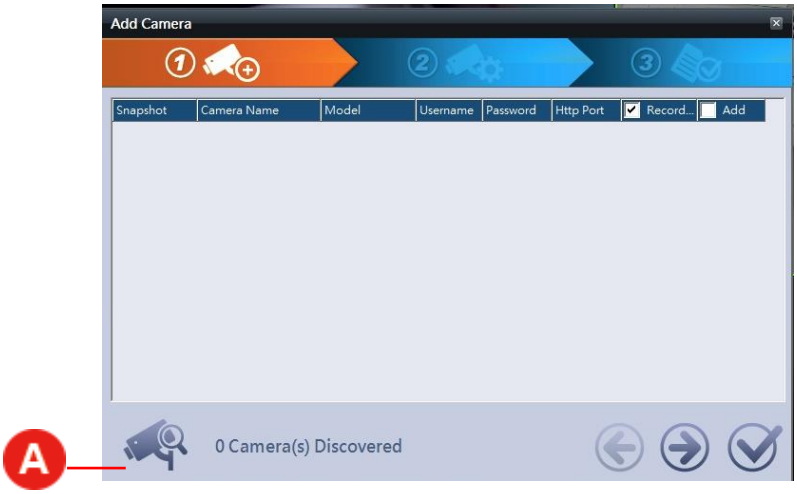


Figure 3-13

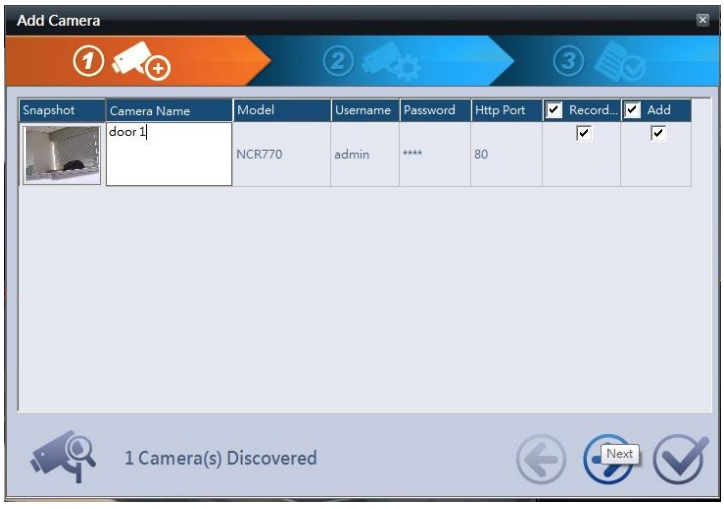


Figure 3-14

C. In the next step ② of the wizard (Figure 3-15), users are able to setup the default options of cameras. All these settings will also be modified later.

(A) Recording/Preview stream：Choose a stream for previewing or recording from available streams of a channel.

(B) Motion Detection：To enable full-area motion detection or no motion detection.

(C) Audio Recording：To enable audio recording or not.

(D) Recording Mode：Choose to enable full-time recording or event recording (with motion detection, DI events etc.).

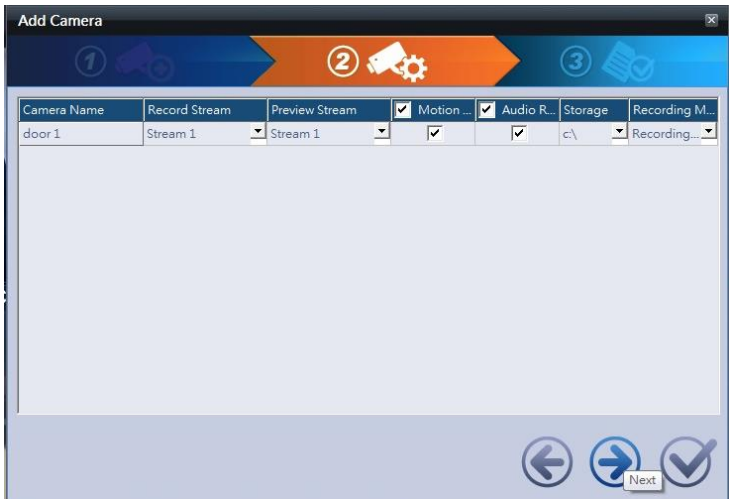


Figure 3-15

(E) Storage: Choose a specific storage media for recording. (This column would not be displayed on the first time running of Installation Wizard.)

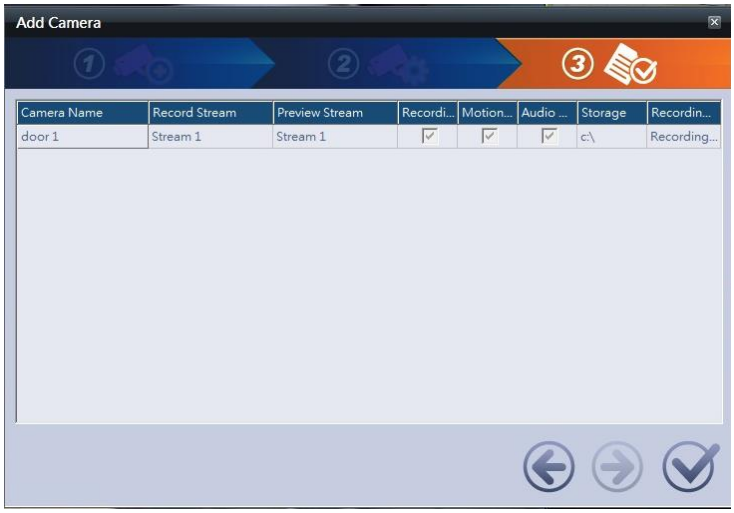


Figure 3-16

(F) In the next page ◆of the wizard (Figure 3-16), all cameras to be added which user checked in the page ② and their option settings would be listed in the table for confirming. Users are able to modify those settings or finish the procedure.

(G) Users are able to click the icon which in the Live View page to open this **Discovery Wizard** (Figure 3-1, B).

(3) Modify the IP Camera settings：

A. Connection (Figure 3-17).

(A) Click at the main page, choose a channel and choose on the Connection Setting button a dialog box **Camera Connection Setting** will be pop-up (Figure 3-18). Users can modify the **IP Address**, **HTTP Port**, **Account**, and **Password**, and finally click the OK button to complete the modification.

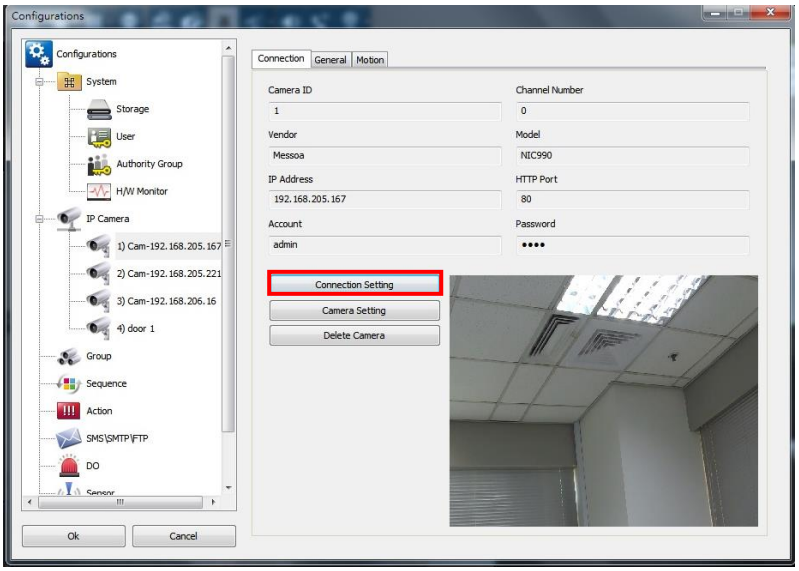


Figure 3-17

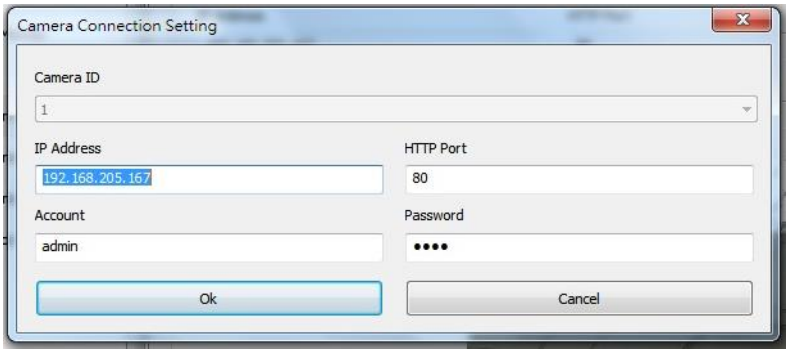


Figure 3-18

(B) Click on the Camera Setting button, the Web user interface of the camera will be opened (Figure 3-19), after editing, click Save and close the internet browser.

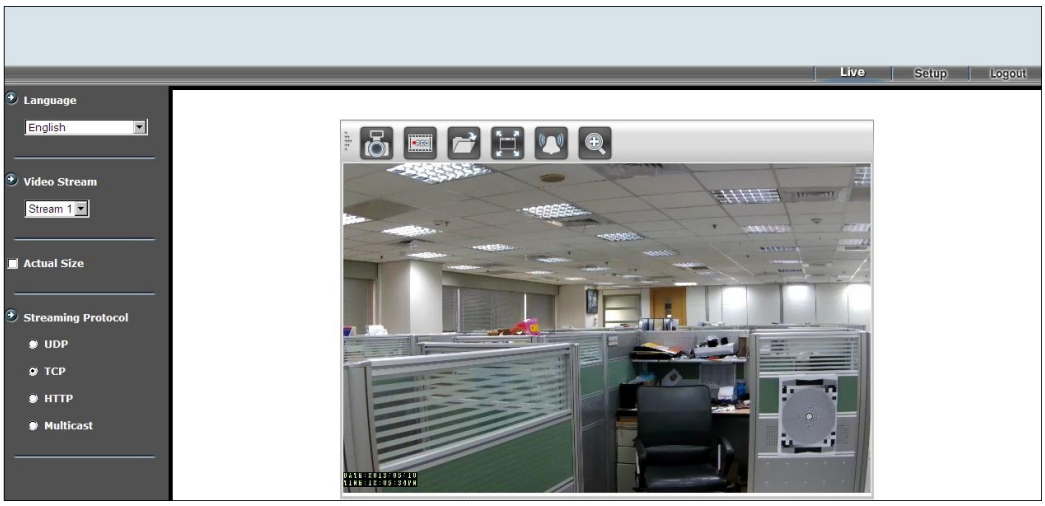


Figure 3-19

(C) Click the Delete Camera button, a confirm dialog box will be pop-up to confirm the deleting (Figure 3-20). Check for the deletion-related items and click Yes to delete the selected camera according to user's requirement.

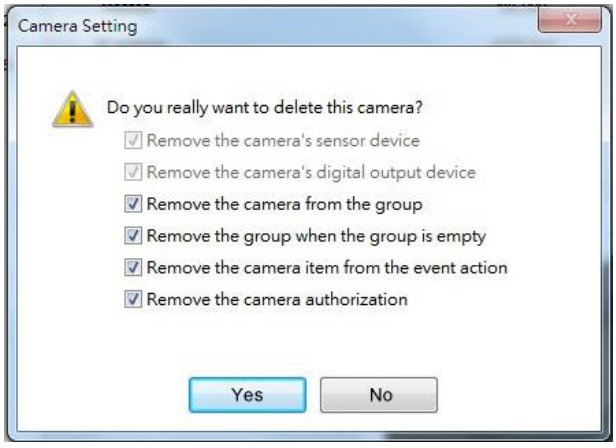

Camera Setting
Do you really want to delete this camera?
Remove the camera's sensor device
Remove the camera's digital output device
Remove the camera from the group
Remove the group when the group is empty
Remove the camera item from the event action
Remove the camera authorization
Yes
No

Figure 3-20

B. General (Figure 3-21)

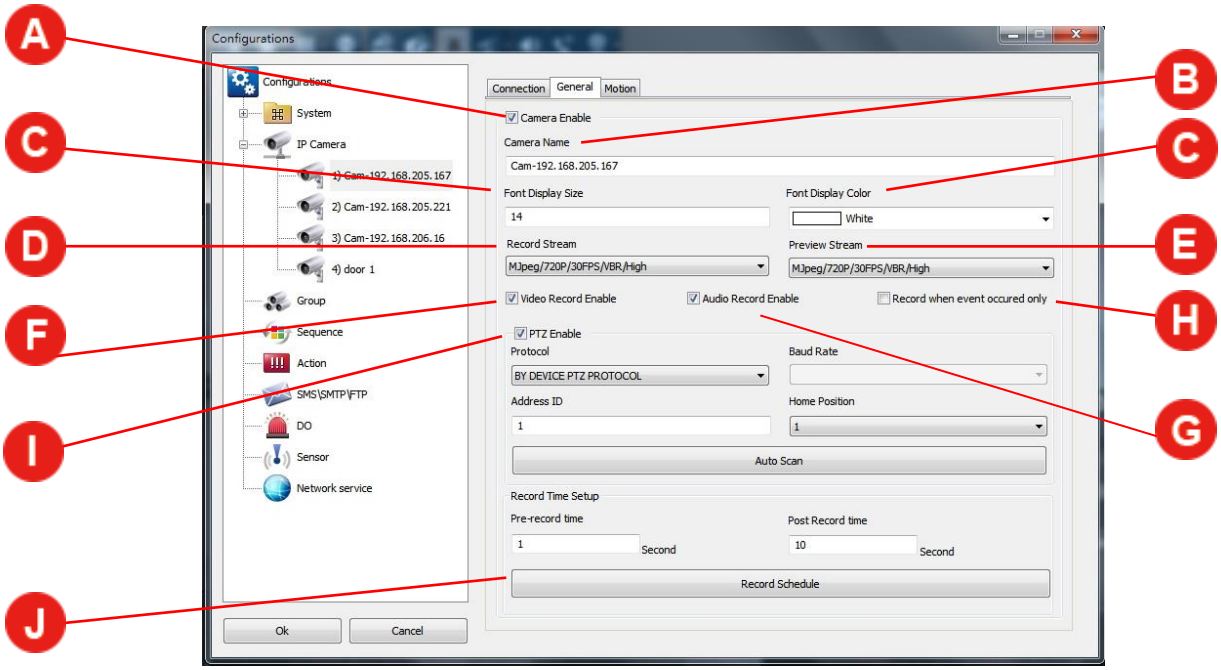


Figure 3-21

A Camera Enable：When checked, the channel will be activated.

B Camera Name：A name or description for the camera.

C Font Display Size, Font Display Color：The font size and font color settings for the OSD on the real-time video.

D Record Stream：To specify a proper stream for recording

E Preview Stream：To specify a proper stream for previewing.

F Video Record Enable：Enable or not to record the video.

G Audio Record Enable：Enable or not to record the audio.

H Record when event occurred only：If this item is checked, the recording won't be started unless any event occurred.

I PTZ Enable：Enable or not the controlling of PTZ for a speed dome camera or a camera with a PT Head.

J Record Schedule：Users can specify the recording schedule by weekdays or dates. (Figure 3-22)

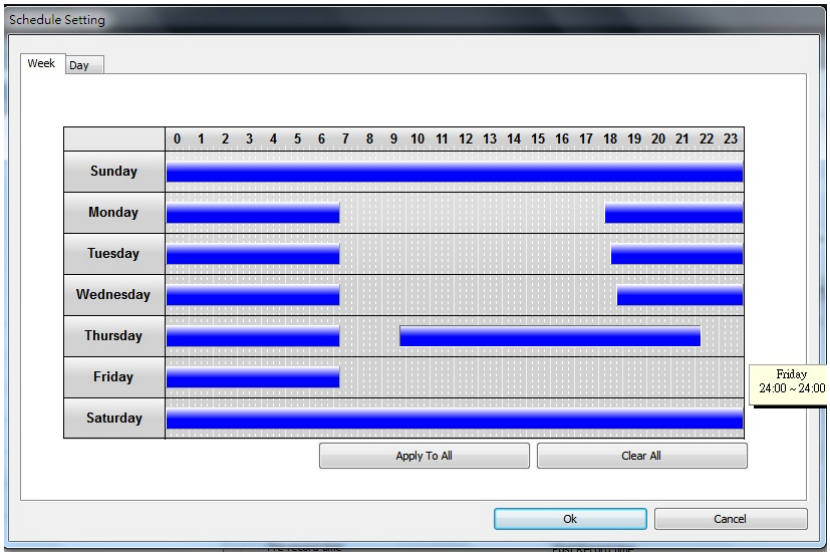


Figure 3-22

- Pre-record time / Post Record time (Figure 3-21)：The length of time for event recording. The system default value is 3 seconds for pre-recording and 10 seconds for post recording. This function usually works with the motion detection or other events related to cameras. Once any event occurred, 3 seconds of video will be recorded before the occurring time of event (can be set between 0～10 seconds), and 10 seconds of video will be recorded after the occurring time(can be set between 0 and 3600 seconds), in this example, the entire length of recording is totally 13 seconds.

C. Motion：(Figure 3-23).

Ⓐ Motion Enable：To check it to enable the motion detection function.

Ⓑ Event Interval Time：If several events occurred within **Event Interval Time**, all of the events will be treated as a single event. This default value is 10 seconds and can be set between 0 ～ 3600 seconds.

Ⓒ Sensitive：This setting defines the sensitivity of the motion detection. This default value is 80 and the value can be set between 1～100. The higher value means the higher sensitivity.

Ⓓ Add Action Zone：Click this button to create a zone for motion detection.

Ⓔ Delete Action Zone：Click this button to specify a zone which is disabled for motion detection.

Ⓕ Select Whole Zone：Click this button to set the whole area on the video become detection zone.

Ⓖ Delete All Zone：Click this button to disable all motion detection zones in the picture.

Ⓗ Motion detection schedule：To set when to enable/disable the motion detection according to weekday/hours or calendar date. (Refer to Figure 3-24)

Note：One channel can only have one detection zone; therefore no matter how many zones are drawn in a channel, they will all be regarded as one irregular-shaped zone.

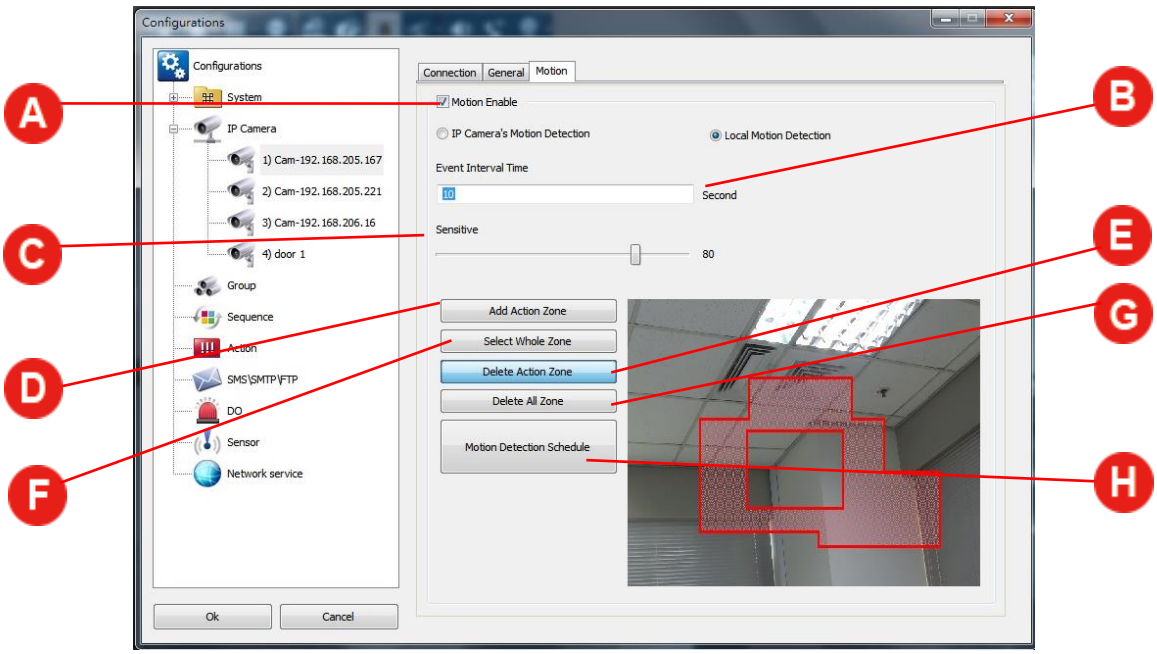


Figure 3-23

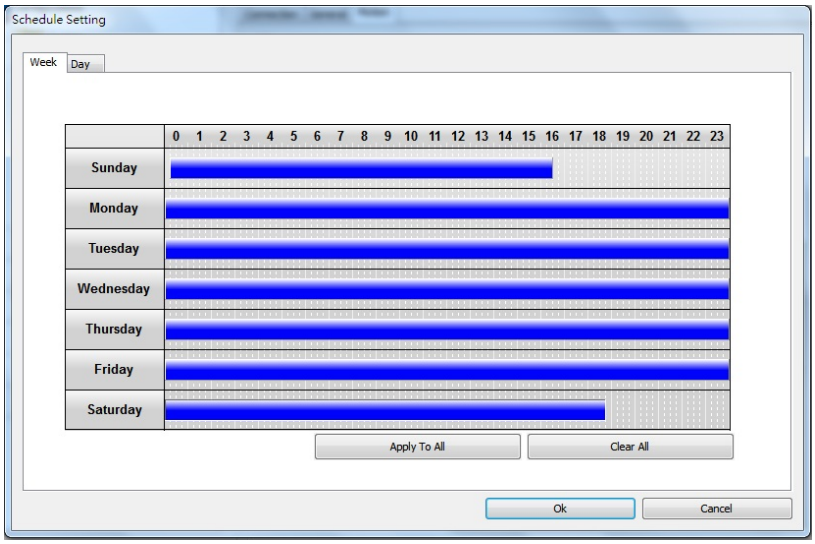

Schedule Setting
Week
Day
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Apply To All
Clear All
Ok
Cancel

Figure 3-24

4.6 Group Settings

User can create, update, duplicate, and delete channel groups in this section. Instructions：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Choose Group in the function tree (Figure 3-25) to adjust the following configurations：

(1) Add a group

A. Group Name A：

B. Input a name for the Camera Group.

C. Select Camera B：

D. Users can select several cameras join the group by simply dragging a camera which is listed in the **Camera** list and dropping it in the **Select Camera** list. Repeat this drag-and-drop process until you have selected all cameras you want to be in this group, and finally click the Add button to complete the operation.

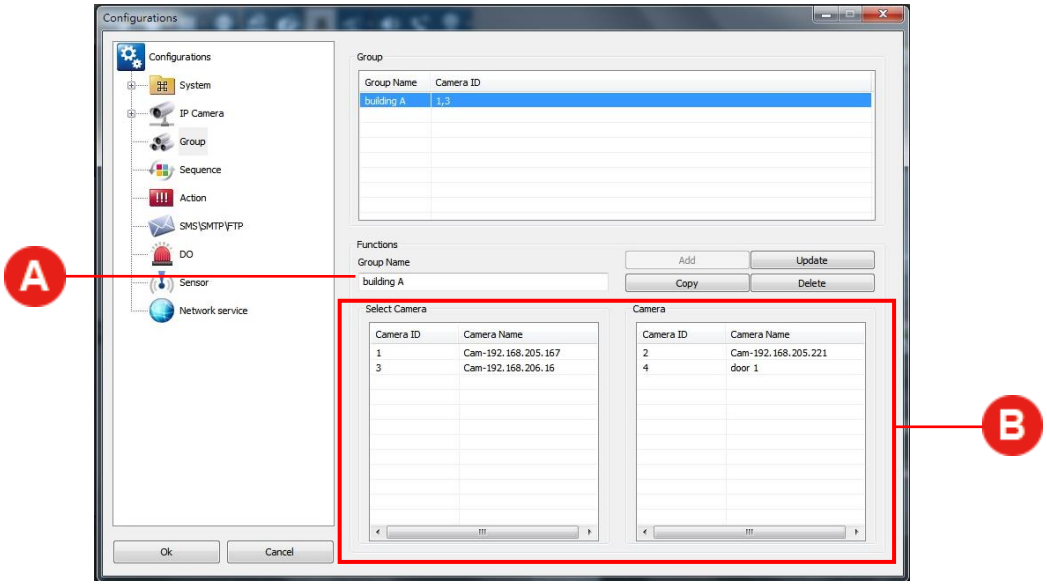


Figure 3-25

(2) Duplicate Groups

Select the group (which is listed in the **Group** list) you want to duplicate and click on the Copy button to create a new group, and then you can assign a new name for the new group.

(3) To delete the group

Select the group (which is listed in the **Group** list) you want to delete and finally click on the Delete button to delete it.

(4) Update Group

Select the group (which is listed in the **Group** list) you want to update, modify the contents, and then click the Update button to update the group information.

4.7 Sequence Settings

To provides the “Recursive Playing” function across camera groups. The “Sequence” can be created, updated, duplicated, and deleted by users.

Instructions：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click the tree view item, **Sequence** (Figure 3-26), to adjust the following configurations：

(1) Create Sequences

A. Sequence Name：A name or a description of this Sequence mode.

B. Interval Time：This time is defined the time how long to wait to switch to the next Group (Camera Group) to display.

C. Schedule Setup：Click the Schedule Setup button, users can assign different Sequences by a weekly or daily schedule (Figure 3-27). Therefore, desired sequence mode will be automatically started and stopped in the period defined by the user.

D. Enter **Sequence Name** and **Interval Time** for the new Sequence and drag Groups from the right list and drop them into the left list, and finally click the Add button to complete the creation of Sequence.

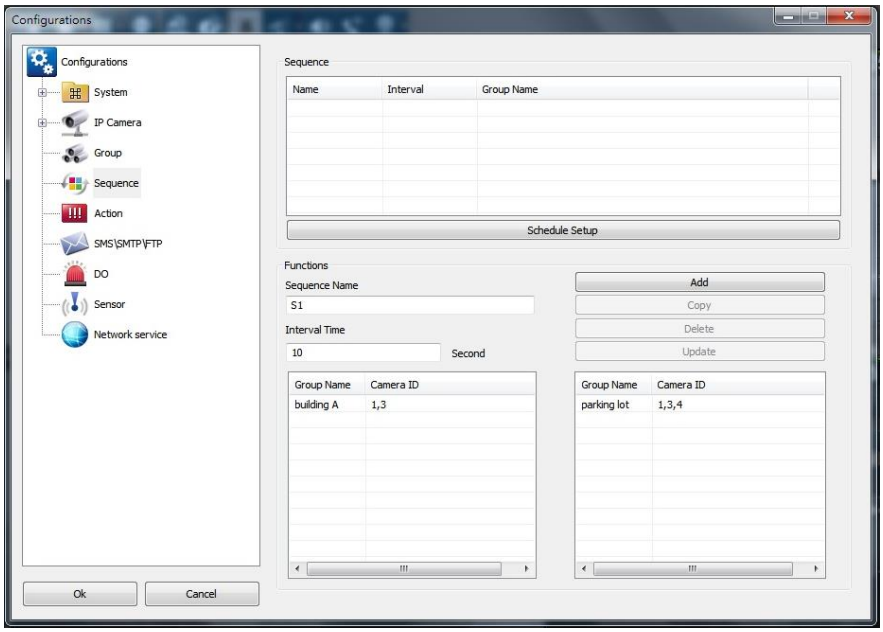


Figure 3-26

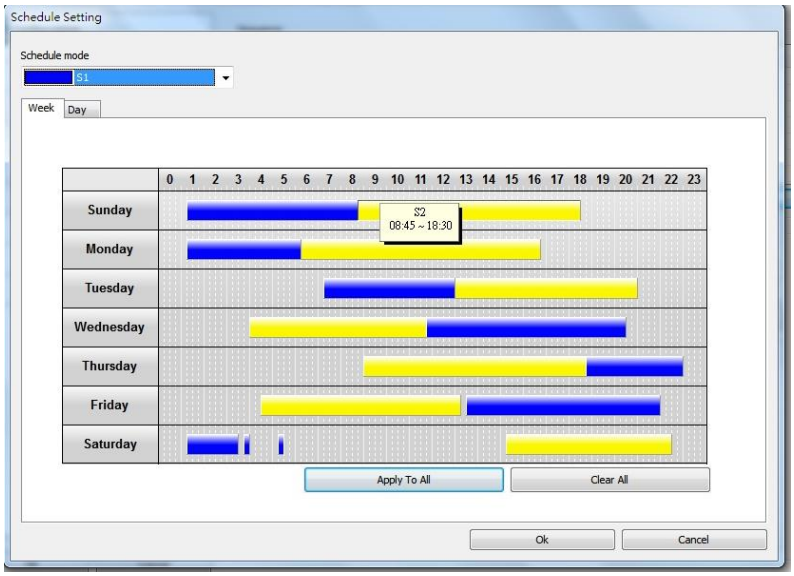


Figure 3-27

(2) Duplicate Sequences

Select the Sequence (which is listed in the **Sequence** list) you want to duplicate and click on the Copy button to create a new Sequence.

(3) Delete Sequences

Select the Sequence (which is listed in the **Sequence** list) you want to delete and click on the Delete button, a confirm dialog box **Sequence Setting** will be pop-up (Figure 3-28), click Yes to complete the deletion or click No to cancel this deletion.

Figure 3-28

(4) Update Sequences

Select the Sequences (listed in the **Sequences** list) you want to update, modify the contents, and finally click the "Update" button to update the Sequences information.

(5) Start Sequencing

In the Live View page, click the icon (Figure 3-29, A), and then the list of available sequence modes will show up, just select one to start the sequence. Click on the mode again to stop it. (Figure 3-29)

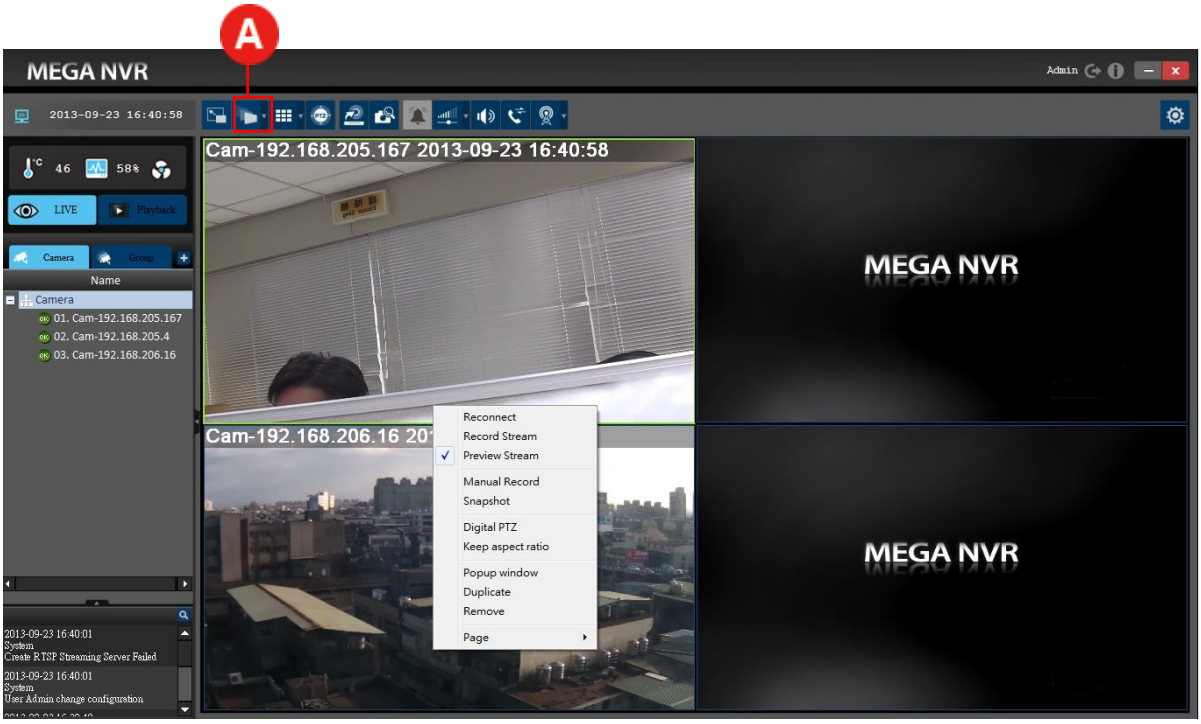


Figure 3-29

4.8 Event Action Settings

Define a variety of response actions for every types of event. For example, to turn on a siren linked on an IP camera for 10 seconds while any motion detection occurred, or to send an e-mail to the administrator to alert him that a hard drive disk is going to be broken, etc.

Instructions：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click Action (Figure 3-30) to adjust the following configurations：

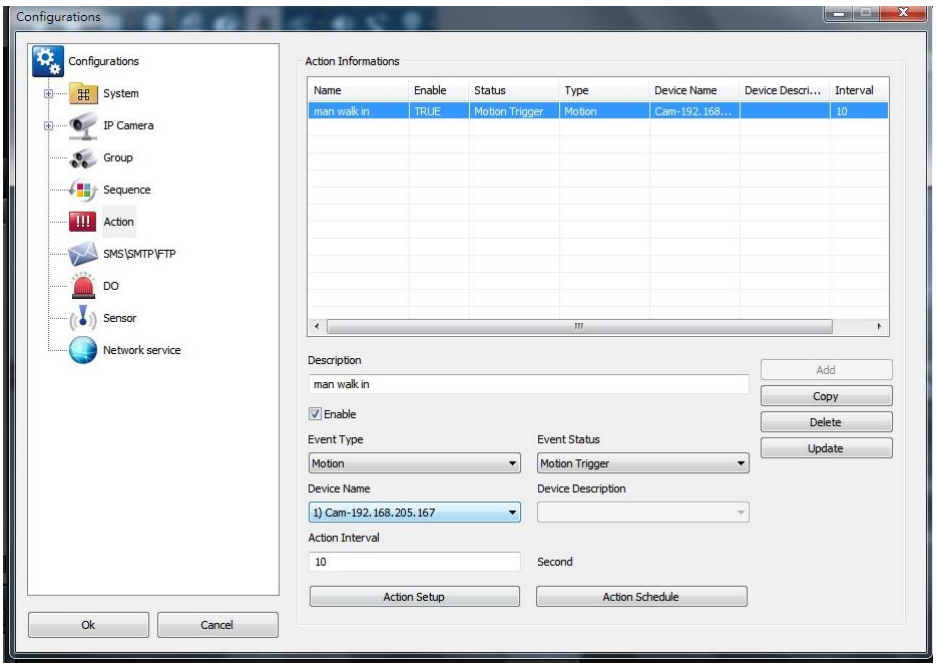


Figure 3-30

(1) Description：A name or a description of the Action.

(2) Event Type：The type of the trigged event (Table 3-1). For **Motion Detection**, **Sensor**, and **Camera Signal**, the items **Device Name** and **Device Description** are required.

Event Type	Status
Record	Recording space full
	Recording storage regain space
Motion	Motion
Sensor	Sensor
Video Signal	Video loss
	Video Detected

Table 3-1

(3) Device Name：A name of the device that the event belongs to.

(4) Device Description：A name of the device that the event belongs to.

Note： Please refer to Section 4.11 Sensor Settings.

(5) Action Interval：If the same event occurred within a period of event interval more than one time, all of the events will be treated as a single event. This default value is 10 seconds and the value can be set between 0 ～ 3600 seconds.

(6) Action Setup：Click on the **Action Setup** button to open a dialog box titled **Action Item Setting** (Figure 3-31). Users can set an action definition by selecting actions.

A. DO：Digital Output, to trigger external digital devices attached on IP camera. For example, siren and alarm light, speaker, etc.

Note： Refer to Section 4.10 DO (Digital Output Device Settings).

B. PTZ：To drive the specific speed dome camera to aim a specific position for a specific time.

Note： Refer to Sections 3.7 Speed Dome Camera Control and Section 4.8 Event Action Settings (PTZ related information)

C. E-Mail：To send an email to relevant person.

D. SMS：To send a SMS text message to relevant person.

Note： Refer to Section 4.9 SMS / Email / FTP Settings.

E. HTTP Call：To perform a CGI calling to a specific HTTP web site.

F. Video Clip：To start saving a video clip of a specific camera.

G. Snap Shot：To snapshot a picture and save it to a specific folder.

H. Play Sound：To play a user-defined sound.

I. Display：To pop-up a window with user-defined live video of a channel with optional auto-countdown to close window; or to display the real-time videos of a specific camera or a camera group for a user-defined time replacing the original previewing video channel temporarily.

J. Execute App：To execute a specific application on this local server.

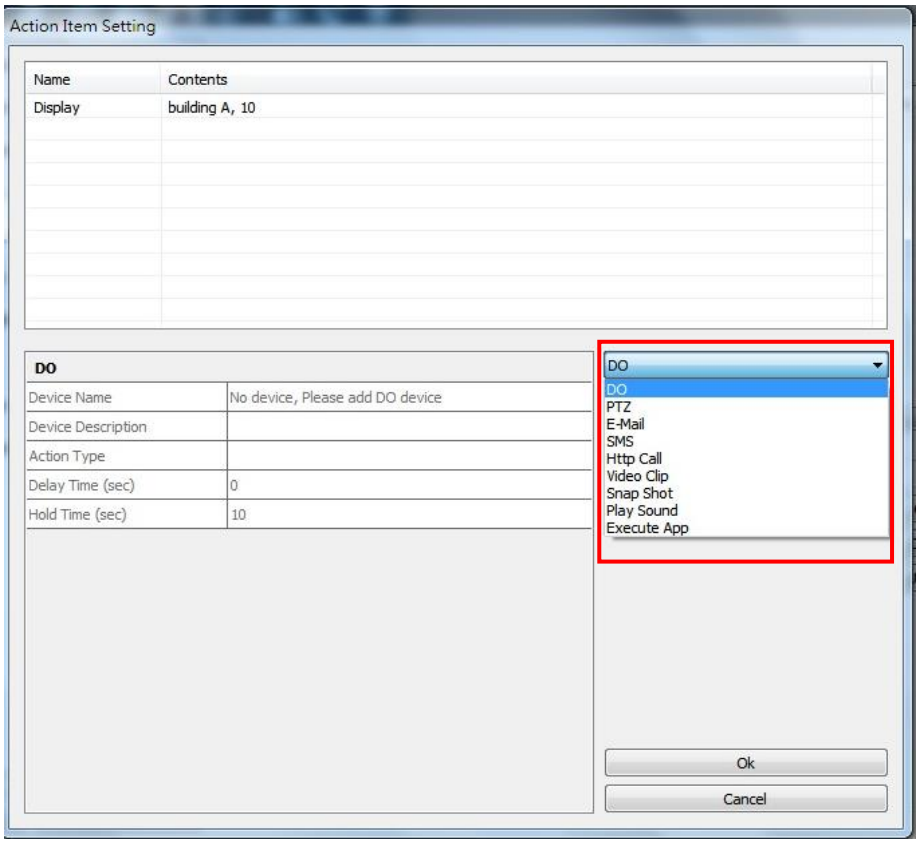


Figure 3-31

(7) After setting, and then finally click the Add button to complete the creation.

(8) Duplicate Action：

Select the Action which you want to duplicate, modify the Action Settings, click the button Copy, you can create another new Action.

(9) Delete Action：

Select the Action which you want to delete, click the button Delete, and then click the Yes button in the confirmation dialog box to confirm the deleting

(10) Update Action：

Select the Action which you want to update, then modify the Action Settings and click the button Update to apply the change

4.9 SMS / Email Settings / FTP Settings

Set configurations for SMS, E-Mail, and FTP. If any Action Definitions involved SMS, SMTP, or FTP, these configurations must be set correctly. Instructions：

C lick the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click the tree view item, **SMS\SMTP\FTP** (Figure 3-33), to adjust the following configurations：

(1) SMS settings

A. SMS：SMS function is enabled when checked,

B. Serial Port Number：Select a port can be used to send SMS.

C. Baud Rate：The system defaults to 115200, system provides 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 / 230400 a total of eight kinds of users based on the need for choice.

(2) SMTP (E-Mail) settings

A. Host Name：Enter the **FQDN** (Fully Qualified Domain Name) of the host.

B. Port：Enter the port number of the host.

C. Authentication Mode：“True” (YES) or “FALSE” (NO) to authenticate the account while sending.

D. Account / Password：Username / Password.

E. Language Code：The encoding code. The system default is Unicode (UTF-8) and the following are available：

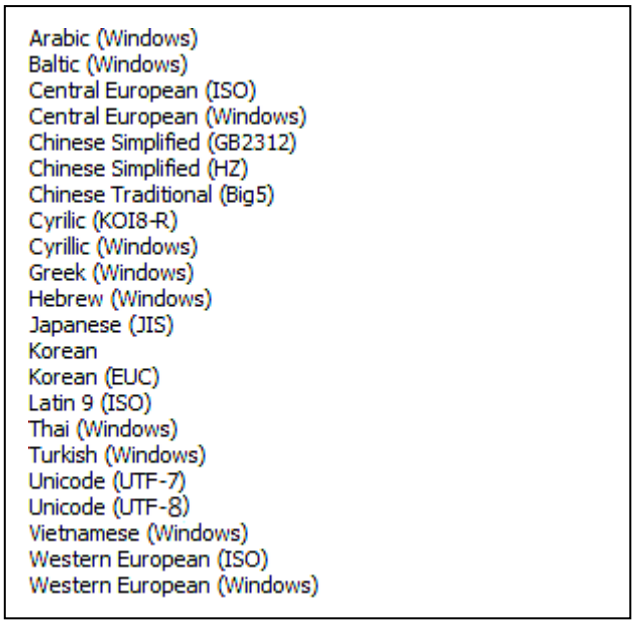


Figure 3-32

F. Sender E-Mail：Users can assign an e-mail address of the sender here.

G. Sender name：Users can assign a name of the sender here.

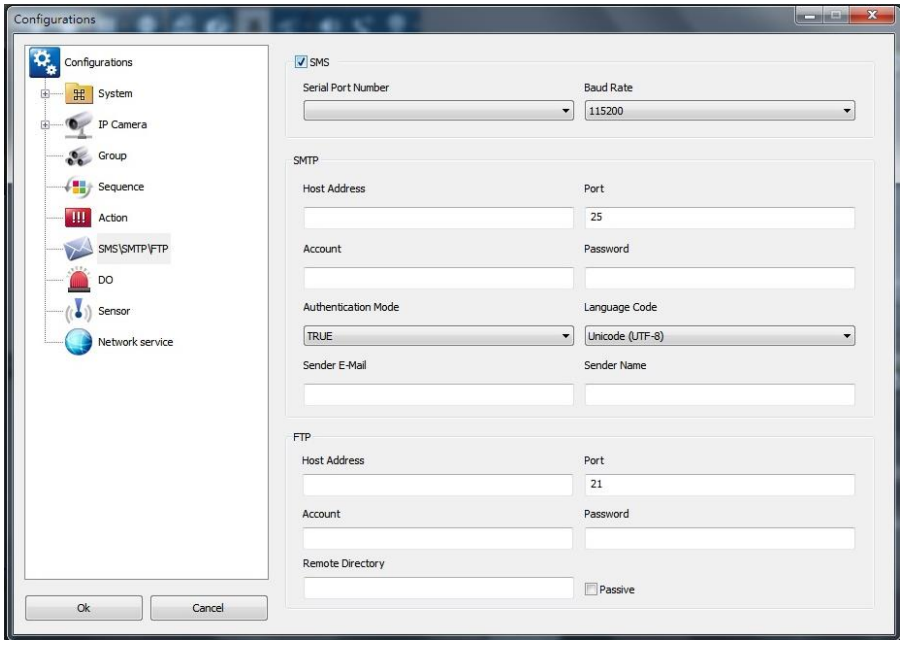


Figure 3-33

(3) FTP settings

A. Host Name：Enter the **FQDN** (Fully Qualified Domain Name) of the host.

B. Port：Enter the port number of the host.

C. Account / Password：Username / Password.

D. Remote Directory：The name of a directory which is the destination directory for uploading. This directory will be automatically created in the home directory.

E. Passive：Check this check box if the FTP site is in Passive Mode.

4.10 DO (Digital Output) Settings

Set the configurations about the digital output devices that are connected to IP Cameras. For example, speakers, alarms, etc. Instructions：

C lick the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click the tree view item. **DO Device** (Figure 3-34), to adjust the following configurations：

(1) Add a device

- A Device Name：Select a name of the IP camera.
- B Device Port：The port number of the master device.
- C Device Description：Descriptions of the DO device.
- D Click the Add button to add a new device.

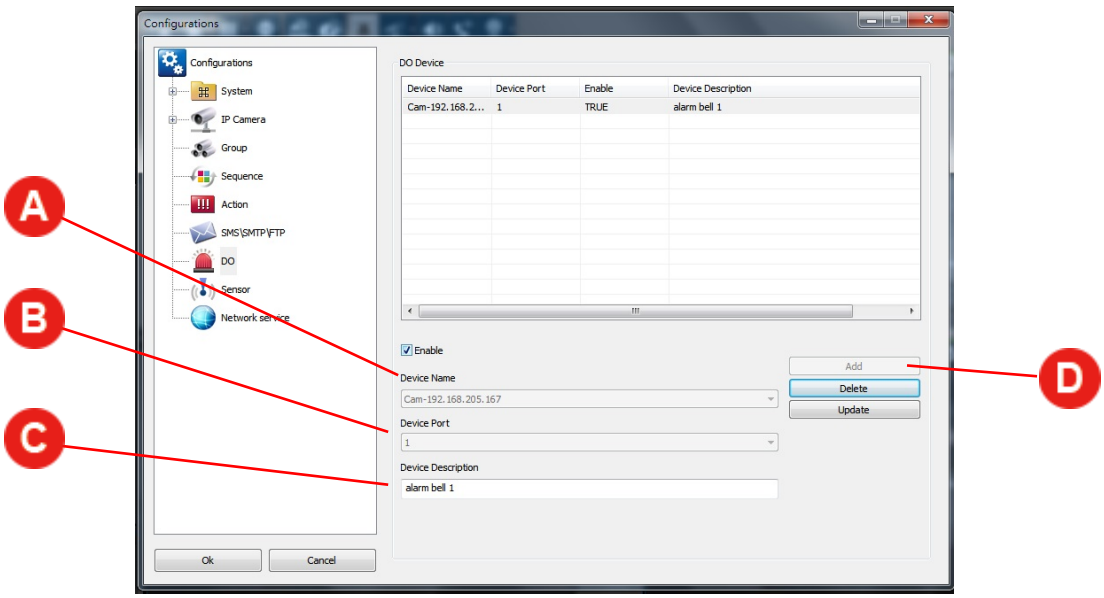


Figure 3-34

(2) Delete the device

Select a DO Device which is to be deleted from the **DO Device** list, click the Delete button, a confirmation dialog box (Figure 3-35) will be pop-up, just click the Yes button or complete the deleting.

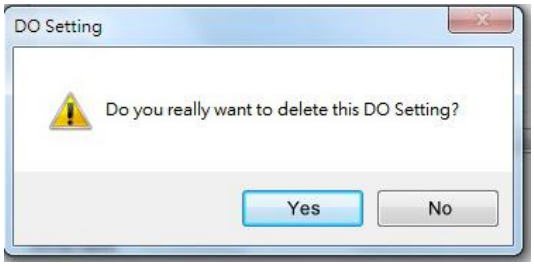


Figure 3-35

(3) Update the device

Select a desired DO Device which user need to updated from the **DO Device** list, modify the contents, and then click on the Update button to complete the updating.

4.11 Sensor Settings

This instruction describes how to create, delete, or update the configurations about sensors (ex., Door Sensor, Smoke Detector, etc.)：

Click the setup icon ( ) and a dialog window which is titled **Configurations** will be pop-up. Click **Sensor** on the tree view items (Figure 3-36) to adjust the following configurations：

(1) Add a sensor device

- Ⓐ Device Name：Select a name of the IP camera.
- Ⓑ Device Port：The port number of the master device.
- Ⓒ Camera Name : To define which channel is actually related to the sensor, so when the sensor is triggered, the related camera will have related actions like video recording or taking a snapshot.
- Ⓓ Device Description：A description for the sensor device.
- Ⓔ Add：After finishing of the above settings, users can click the Add button to add a new sensor device.
- Ⓕ Enable：If this box is un-checked, MEGA NVR will not process the notification from this sensor.
- Ⓖ Mode：Users are able to select one mode to define a time segment (weekly or specific days), a description, an interval, and a delay time for the sensor

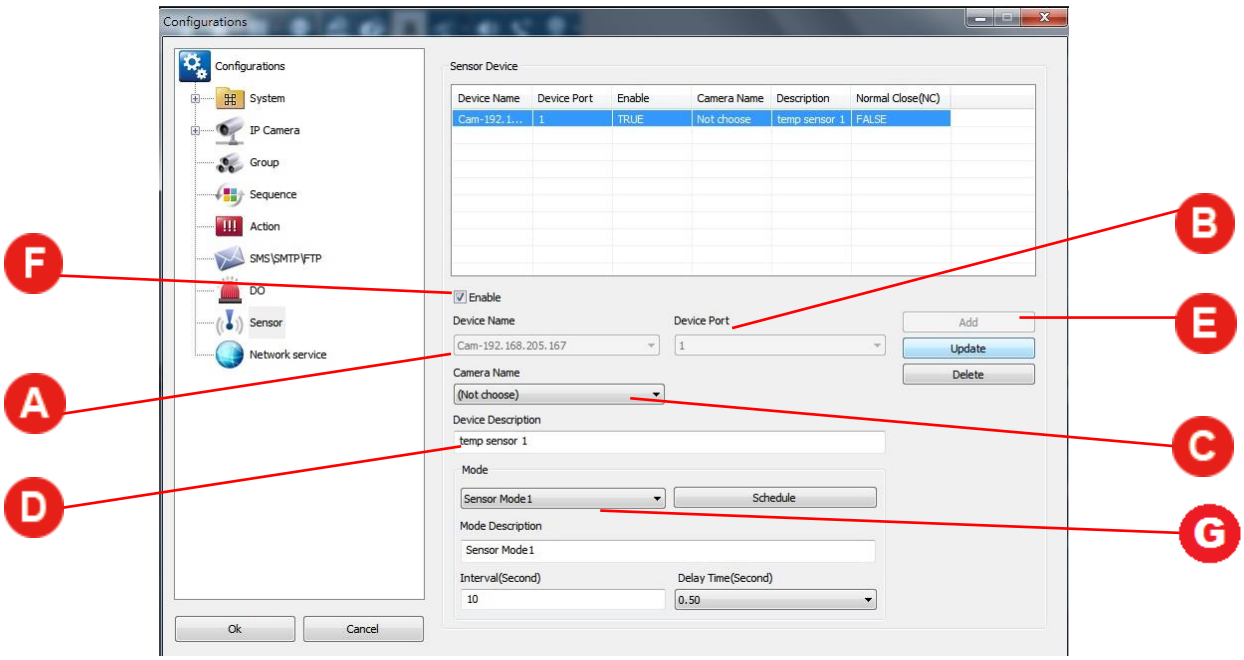


Figure 3-36

(2) Remove the sensor device

Select a sensor device which is to be deleted from the **Sensor Device** list first, and then click the Delete button, a confirmation dialog box will be pop-up (Figure 3-37). Just click the Yes button to complete the deleting or click the No button to cancel.

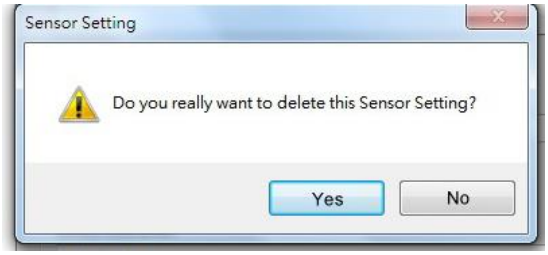


Figure 3-37

(3) Update a sensor device

Select a sensor device which is to be updated first, modify the settings, and finally click the Update button to complete the updating.

5 Playback & Log search

5.1 Playback

Users can playback and query out desired time spot by date/ time, events, snapshots, and bookmarks, or process an “Smart Search” by motion detection analysis toward recording file.

Instructions：

In the Live View page of the MEGA NVR system, click the Playback icon (

) and the page will be switched for the Playback View page (Figure 4-1, A).

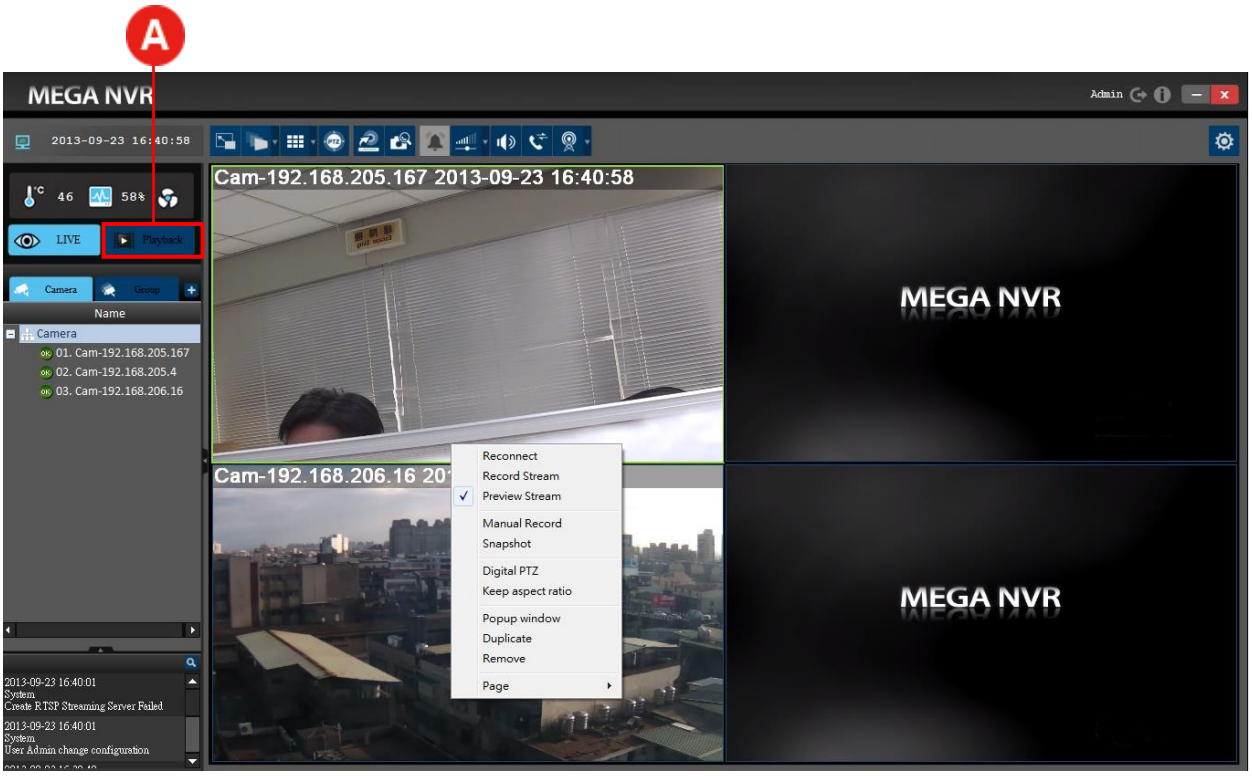


Figure 4-1

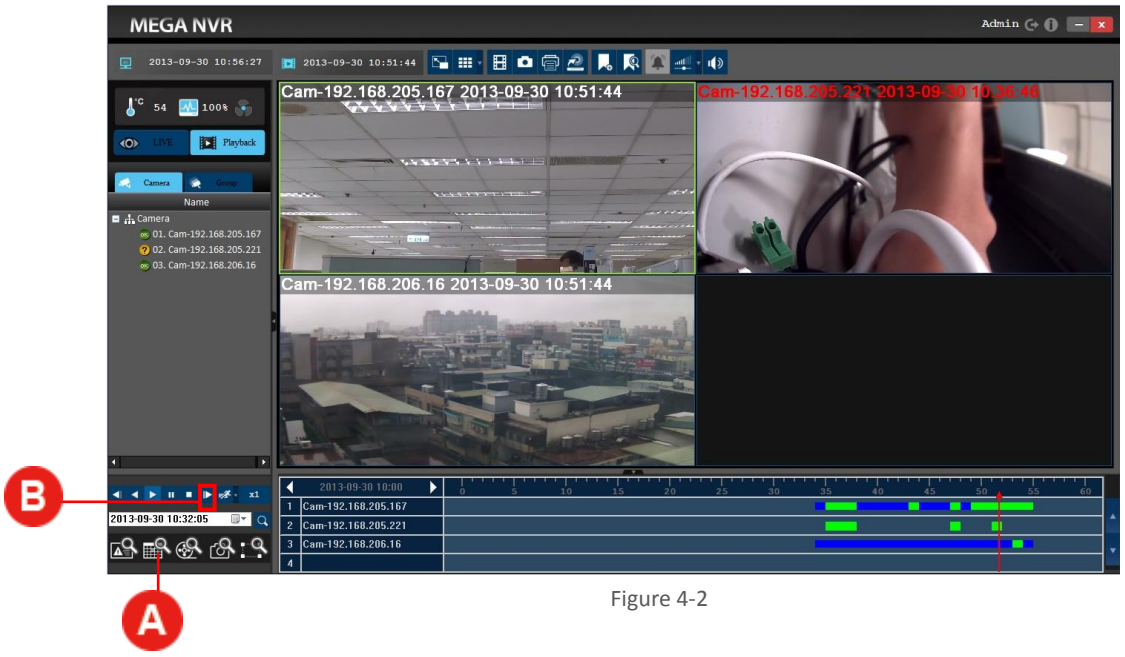


Figure 4-2

Note： An authorized permission is required to do the following about playback operation.

(1) Date / Time Search

A. Click on the Search By Time icon ( ) (Figure 4-2, A), pop-up the **Search By Time** dialog box (Figure 4-3)

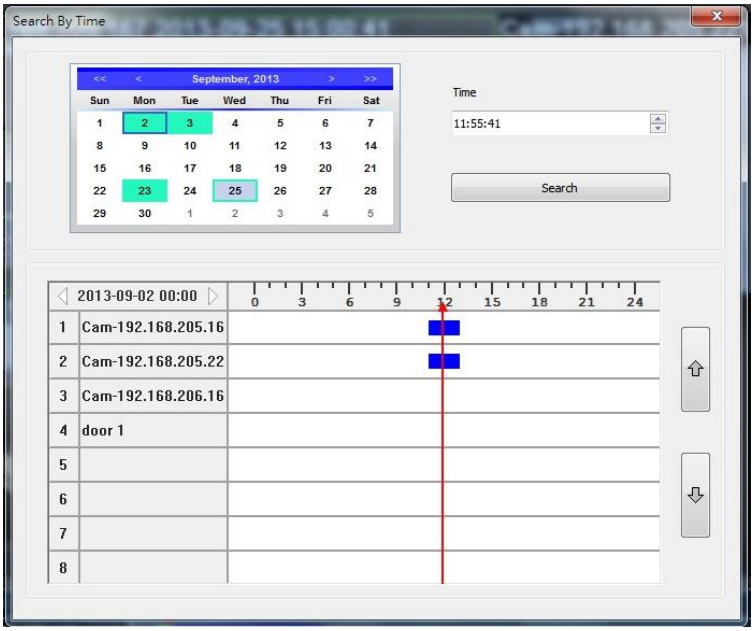


Figure 4-3

B. In the calendar box (upper part of the **Search by Time**), the date which is marked with green background indicates there are some recordings have been saved.

C. In the camera-time-schedule list (lower part of the **Search by Time**), the time segment which is marked with blue background indicates the corresponding camera has recording files at the time segment. There is a vertical blue line which indicates the base time of the playback.

D. Users are able to move the blue base time line to any time, and then click the Search button, the **Search by Time** dialog box will be closed and the base time of the playback is changed correspondingly.

E. Press the icon (Figure 4-2, B) will start playback of the video.

(2) Event Search

A. Firstly, select a camera which is to be searched on the main console of playback.

B. Click on the Event Search button, Search by Event dialog box will be pop-up (Figure 4-4).

C. After specifying the condition (date, time, event type, etc.), click the Search button, it will list the event log about the camera.

D. For the event log, there are four types：

(A) Motion：Be trigged by motions detected.

(B) Sensor：Be trigged by sensors active.

(C) Video Signal：Be trigged by videos missed or recovered.

(D) Manual Record：Be trigged by users' Manual Recording.

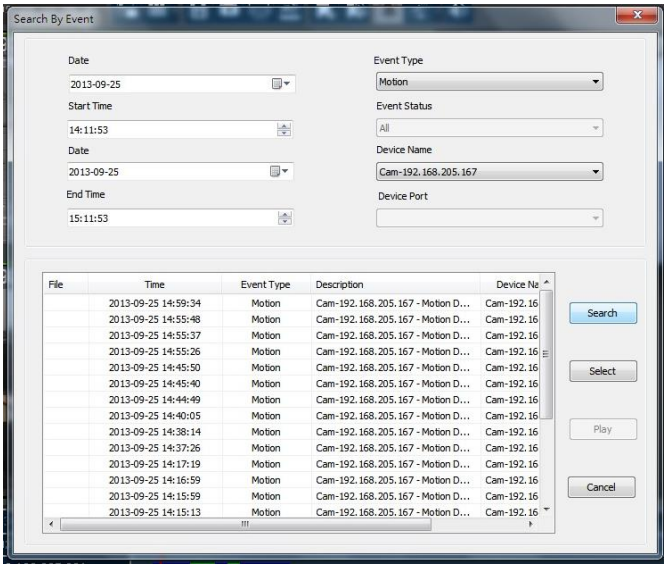


Figure 4-4

Select a event log and click the Select button, the **Search by Event** will be closed and the playback time will be jumped to the time of the event, and automatically start to play.

If “save video clip” for this channel was set when setting event action, user will be able to see a “ ” mark next to the event log in the **Search by Event** dialog box. Then user can directly select on the log with video clip and click the Play button, a video window will pop out and the event video clip will aumatically start to play.

(3) Smart Search

It can help users to analysis and check a specific area in the recording files with a specific time segment.

To start an Smart Search process, users should select a camera which is to be analyzed first, and then click the **Search By Smart** in the Playback Viewpage (Figure 4-5, A), and assign the conditions (date, time, sensitivity, and interval) in the **Search By Smart {name of camera}** dialog box.

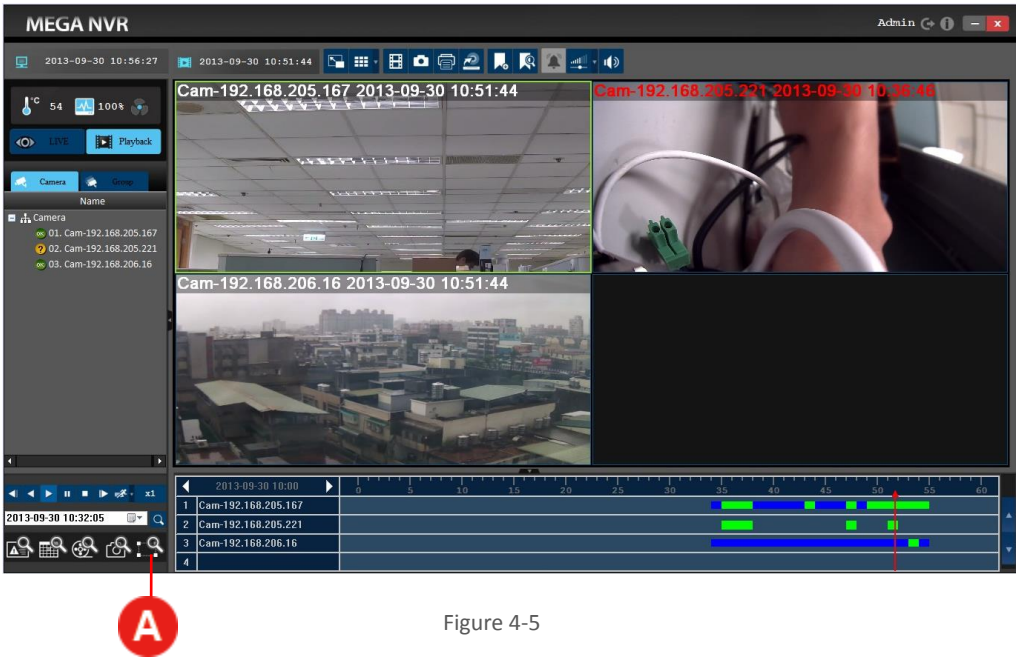


Figure 4-5

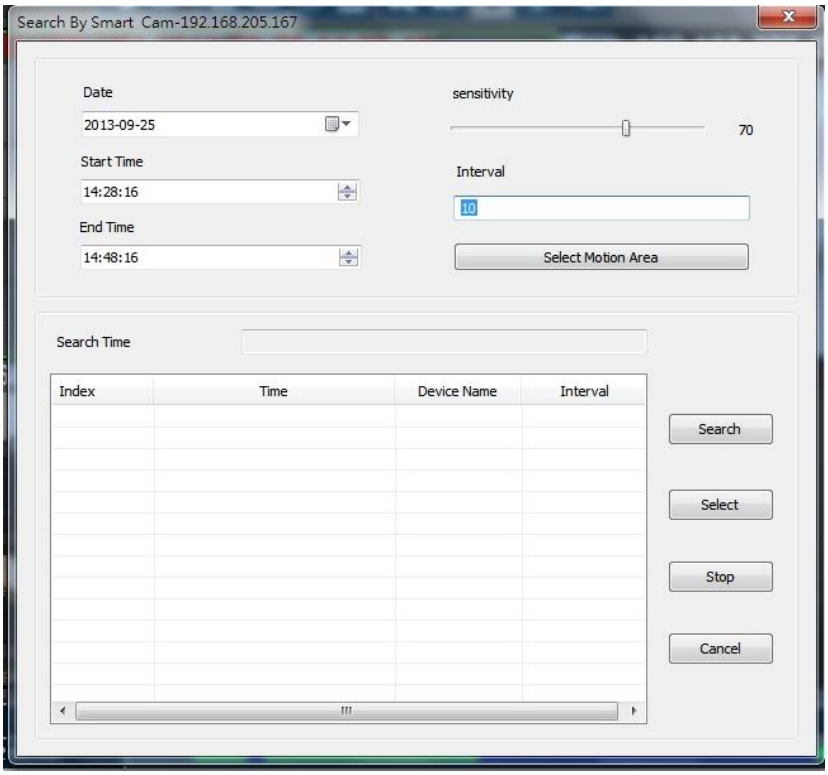


Figure 4-6

A. Select Motion Area：Click this button to define the areas for motion detection (Figure 4-6).

(A) To add a new detecting area, check the **Add Motion Zone** check-box first, and then start to assign which part to be added.

(B) To delete a detecting area, check the **Delete Motion Zone** check-box first, and then start to assign which part to be deleted.

(C) To add all the detection area, click on the Select Whole Motion Zone button.

(D) To delete all the detection area, click on Delete All Motion Zone button.

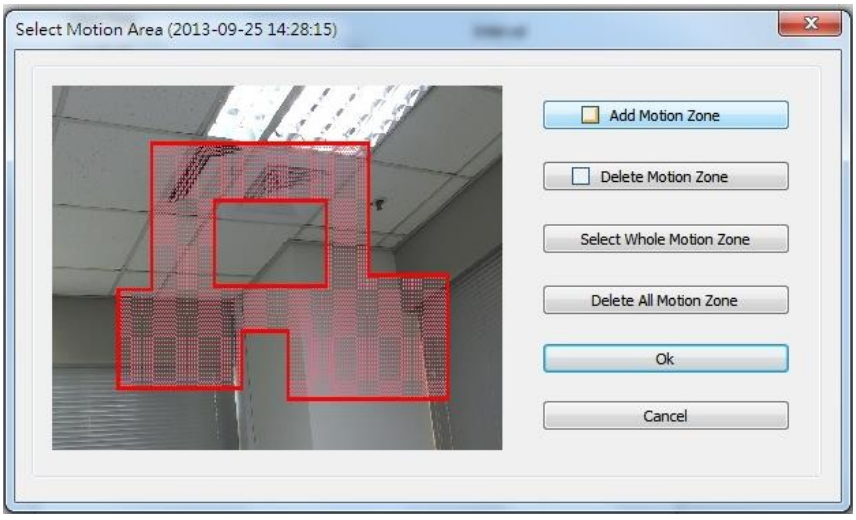


Figure 4-7

B. After assigning the detecting zones, click on Search button (Figure 4-6), you can analyze the selected zone on the recording video and search results will be displayed on the dialog. Click on one of these results, and click on "select" button to return to main console of playback and automatically start to play from the event time spot(Figure 4-8)
C. If you want to stop the event searching process, click “Stop” button.

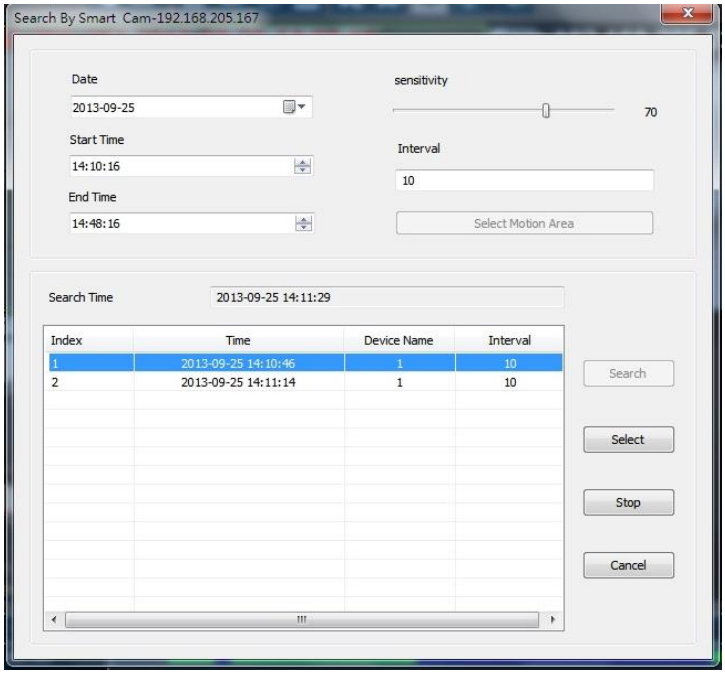


Figure 4-8

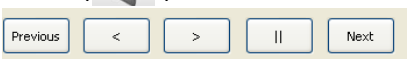
Figure 4-9

(4) Thumbnail search

A. In the playback view page, select a channel you want to execute thumbnail search. And then click the Thumbnail Search icon ( ) (Figure 4-9, A). A "**Thumbnail search {Camera name}**" dialog box will be pop-up. (Figure 4-10)

B. Select the date and start time for this search, and enter a valid interval (the time interval between each thumbnail) and click on Search button.

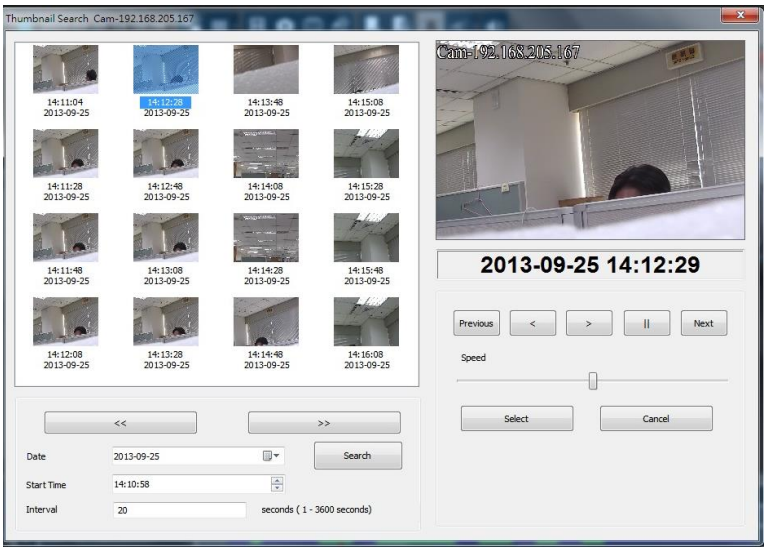
C. Thumbnails will be displayed on the left upper side of the dialog with their time under the image. If thumbnail can't be retrieved, the icon ( ) will be shown.

D. Video preview： Click on any thumbnail and click 

for video previewing from the time spot of that thumbnail with forward/backward playing, pause, and go to next or previous time spot.

E. Click Select and you will go back to the Playback View page and the time bar will be jumpped to the time of the selected thumbnail and automatically start to play.

Figure 4-10



(5) Print

In the Playback View page, select a camera from one of playing channels, and then click on the Print icon ( )(Figure 4-9, B), it will bring on a **Image Edit {camera name}** dialog box (Figure 4-11), modify the following information, then click the "Print" button, and select Print image size, you can have the picture print out.

- Rotation：180 degree rotating for this photograph.
- Crop：Select a region on the photo by dragging & dropping, then click on this button, this area can be enlarged and rest of the area will be deducted.
- Revert：Restore for the previous change.
- Show Date / Name：Put Camera Name and Date / time on the picture.
- Save with watermark：User can choose to overlay a watermark on the image. Click on Watermark and a dialog (Figure 4-12) will be pop-up with all related configuration. Afterward, click “ok” to save all configurations and close the dialog. Then if user check on “Show Watermark” check box, the image will be save with watermark successfully.
- HSL effects：To adjust the picture’s Brightness and Saturation instantly. Click "Reset" button to restore to default.
- RGB effects：To adjust the picture's color scheme with the level of red, green and blue. Click "Reset" button to restore to default.
- Print：After all above settings are done, press “Print”, select the size of the actual printing, and click “ok” to activate the printing.

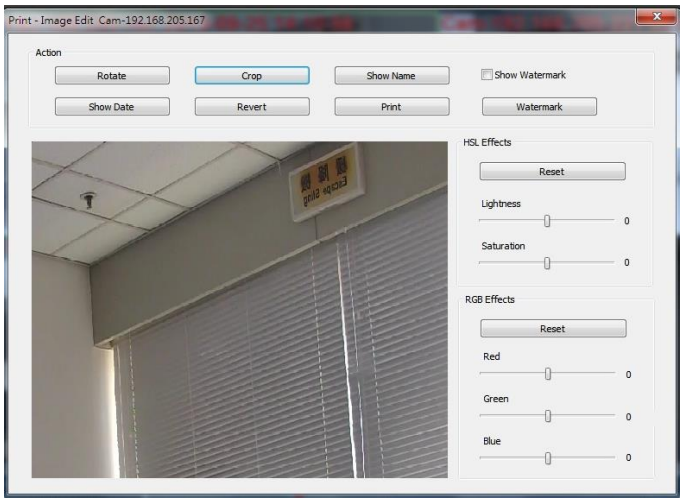


Figure 4-11

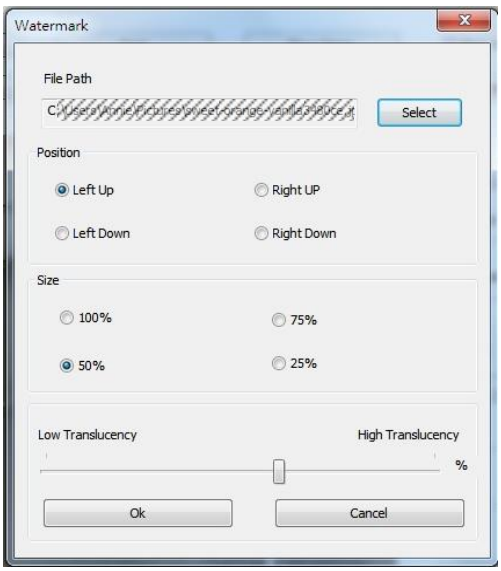


Figure 4-12

Note： To use the Photo Print functions, the privilege of local data export is required.

(6) Save Video (as AVI)

In the Playback View page, select a camera from one of playing channels, and then click the Save Video icon ( ) (Figure 4-9, C), pop-up **Save Video {camera name}** dialog box (Figure 4-13). After finishing the following settings, press Save and set the storage path, the AVI file will be saved successfully.

- To set the start/end date/time of the video saving period, user can input the date/time manually, or select from event's time, from manual snapshot search's time, or from a bookmark.
- Displays watermark： Save AVI movies with watermark overlay. Check the **Show Watermark** check box, and click Watermark for detail settings.
- Display Name / Date： Check for displaying the camera's Name and Date/time on the image.

Note： To enable the function of Save Video, the right of "local data export" must be granted first. The progress of saving and the date/time of on-going data will be displayed in the "Progress" column.

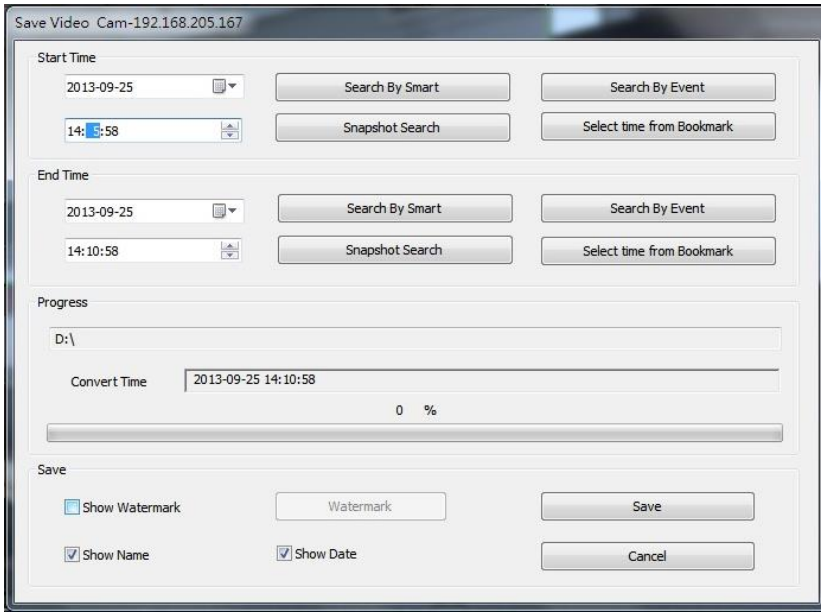


Figure 4-13

(7) Save image

In the playback page, select a camera from one of playing channels, and then click on the Save Image icon ( )(Figure 4-9, D), it will bring on a **Image Edit {camera name}** dialog box (Figure 4-14), modify the following information, then click the Save button on upper side of this dialog, you can have the picture saved and the dialog will be closed.

- Rotation：180 degree rotating for this photograph.
- Crop：Select a region on the photo by dragging & dropping, then click on this button, this area can be enlarged and rest of the area will be deducted.
- Revert：Restore for the previous change.
- Show Date / Name：Put Camera Name and Date / time on the picture.
- Save with watermark：User can choose to overlay a watermark on the image. Click on Watermark and a dialog (Figure 4-12) will be pop-up with all related configuration. Afterward, click OK to save all configurations and close the dialog. Then if user check on **Show Watermark** check box, the image will be save with watermark successfully. (Figure 4-12)
- HSL effects：To adjust the picture's Brightness and Saturation instantly. Click Reset button to restore to default.
- RGB effects：To adjust the picture's color scheme with the level of red, green and blue. Click Reset button to restore to default.

Note： To enable the function of Save Image, the right of "local data export" must be granted first.

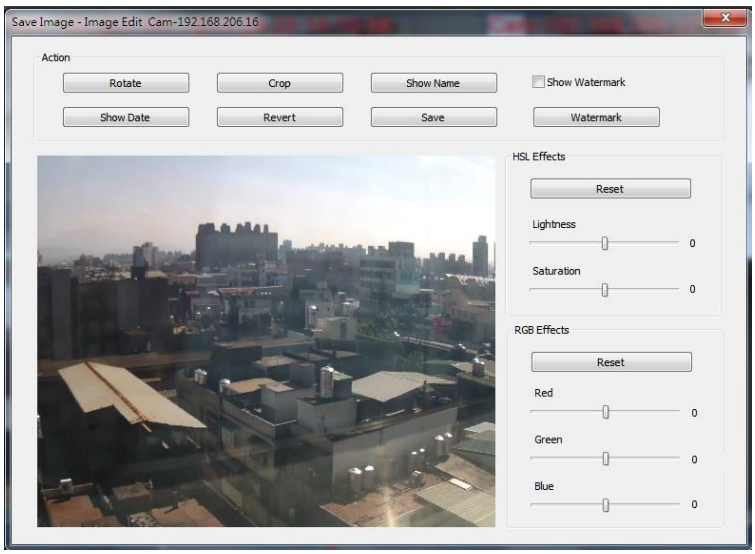


Figure 4-14

(8) Backup

A. In the Playback View page (or Live View page), click the Save Backup icon ( )(Figure 4-9, E), a **Backup** dialog box will be pop-up (Figure 4-15) with two options – Back up to the HardDisk or Burn to CD :

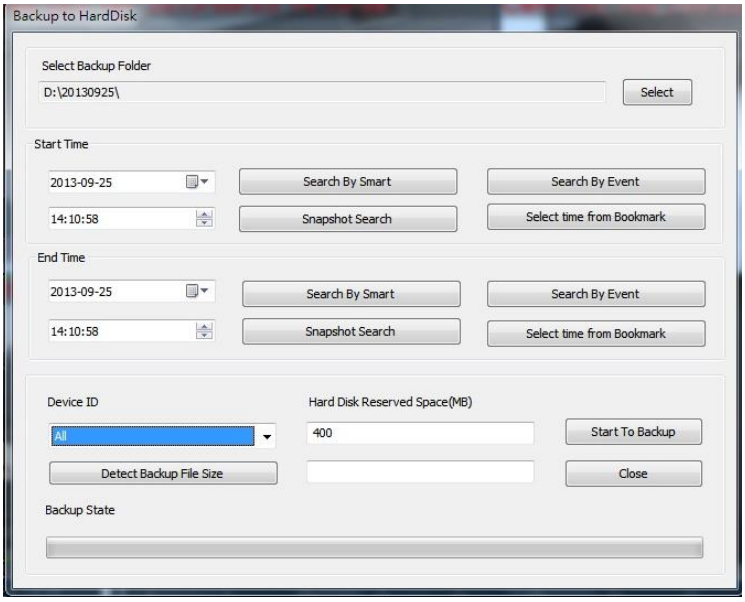
Figure 4-15

B. Click on the **Back up to the HardDisk** button will be pop-up **Backup to HardDisk** dialog (Figure 4-16). To set the start/end date/time of the backing up, user can input the date/time manually, or select from event's time, from manual snapshot search's time, or from a bookmark. If user chooses Burn To CD, the same dialog will also pop out with only some slight difference (Figure 4-17).

C. Click on Detect Burn Volume, estimated data size according to user's configuration will be brought out.

D. Click Burn or Start to backup, the backup will be started and users can check the backup progress on the progress bar on the lowest side of this dialog.

E. Use MEGA Player to play the file you just backed up. (refering to Chapter 8)



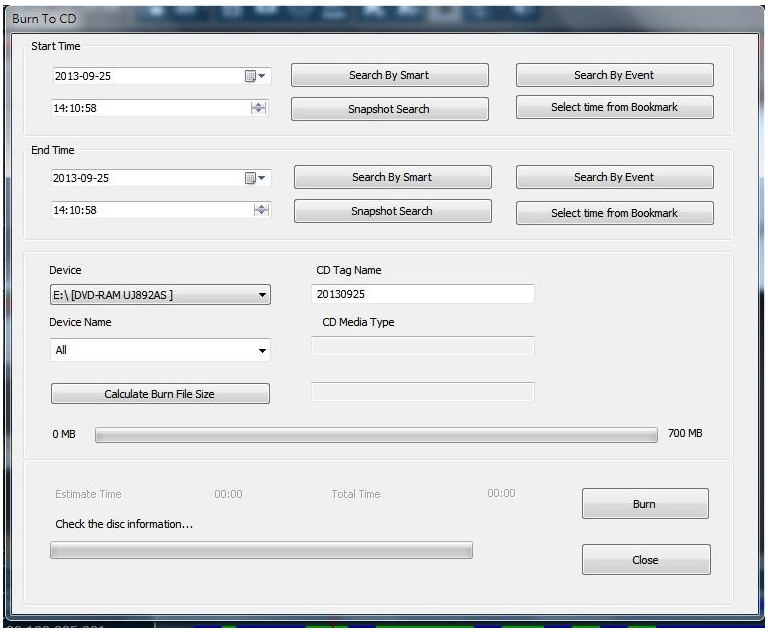


Figure 4-16

Figure 4-17

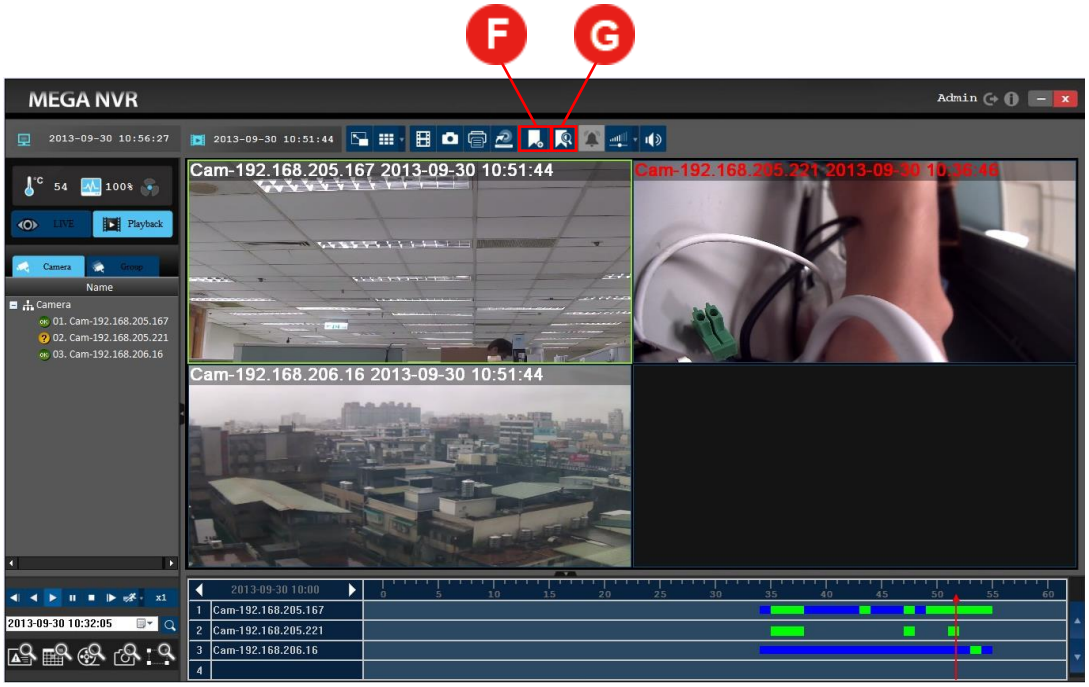


Figure 4-18

(9) Bookmark

Users are able to make bookmarks during video playback when finding any important moment in the record. Users are also able to jump the playback to a specific moment which has marked as a bookmark.

A. Add a bookmark (Figure 4-18)

Click on the icon ( ) (Figure 4-18, F), a dialog **Add Bookmark** will be pop-up. Enter the name of the bookmark and click Save to save this bookmark.

B. Playback by Bookmark (Figure 4-19)

(A) Click the icon ( ) (Figure 4-18, G). The menu of **Bookmark** will be pop-up.

(B) Choose one and press Select, the time axis of playback will be jumped to the time of the bookmark you selected and automatically start to play video.

(C) To delete a bookmark, choose a bookmark you want to delete and press Delete.

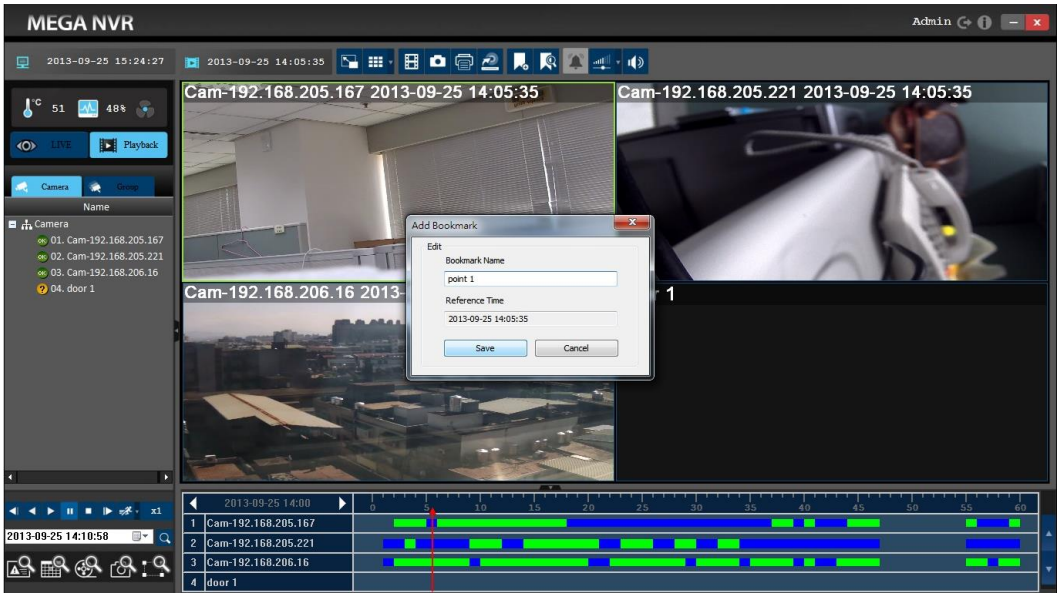


Figure 4-19

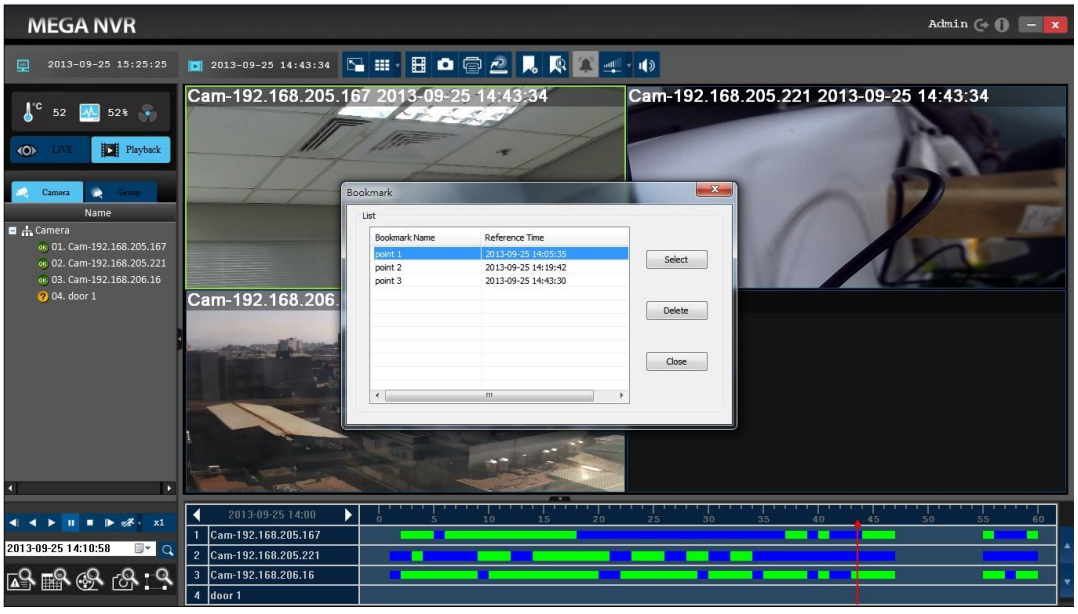


Figure 4-20

5.2 Event Log Query

In the Live View page of the MEGA NVR, click on the View Log icon ( ) (Figure 4-21, A) to bring up the **View Log** dialog box (Figure 4-22). Users are able to query the log with one or some filters (ex. Date, Start / End time, Event type / status, etc.), and then click Search, the logs will be brought out immediately. Afterward, users are able to save as CSV format or print it out.

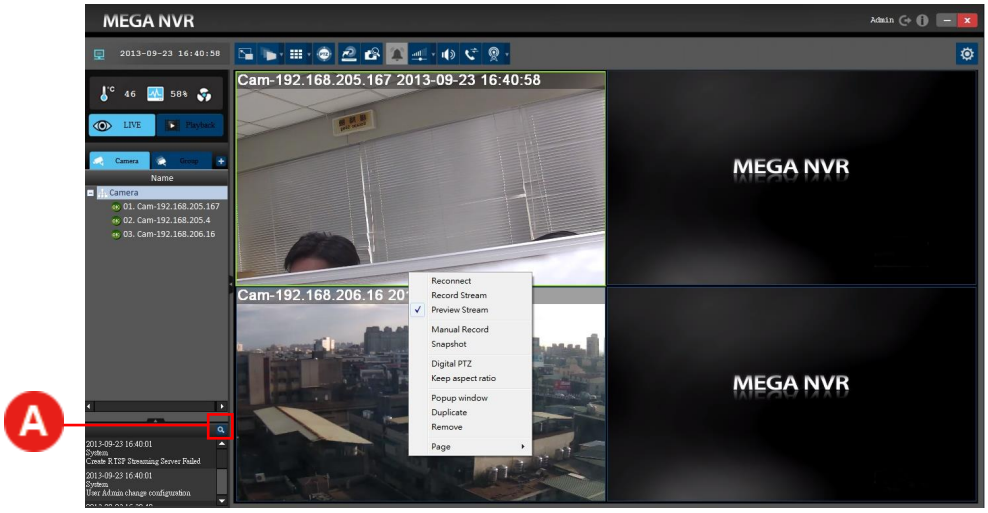


Figure 4-21

Event Type	Status
System	System leave
	Application startup
	Exit application
	Change configuration
	Create Web server Failed
Login	Login
	Logout
	Login Failed
Record	Recording space full
	Recording storage regain space
	Record Failed
Connect	Remote View Connected
	Remote View Disconnected
	Remote Play Connected
	Remote Play Disconnected
	RTSP Remote Client Connected

	RTSP Remote Client Disconnected
Motion	Motion
Sensor	Sensor
Video Signal	Video loss
	Video Detected
Manual Record	Manual Record
E-Mail	Sent successfully
	Failed to send
SMS	Sent successfully
	Failed to send
FTP	Sent successfully
	Failed to send

Table 4-1

Below is the list of all event type and related selectable status.

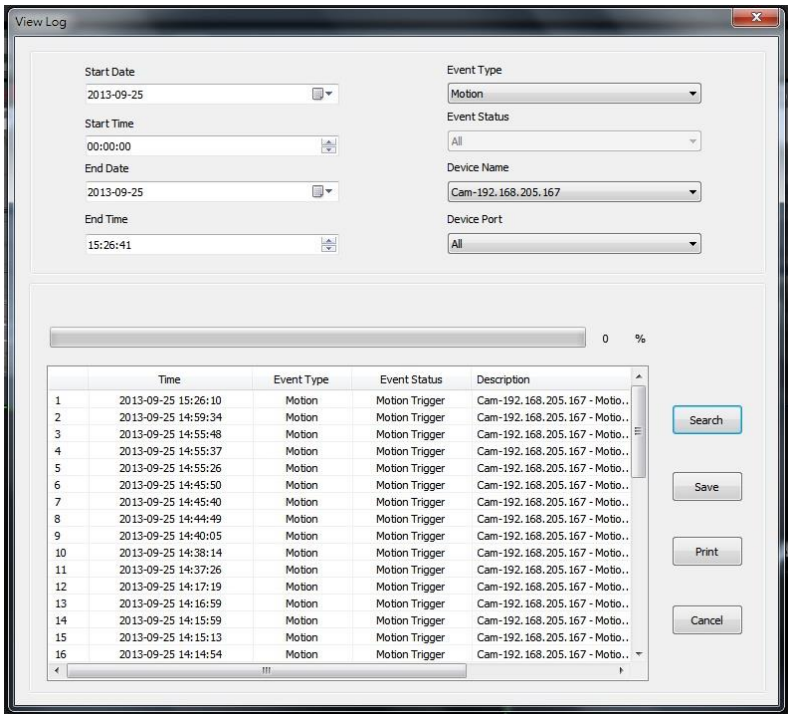

View Log
Start Date
2013-09-25
Start Time
00:00:00
End Date
2013-09-25
End Time
15:26:41
Event Type
Motion
Event Status
All
Device Name
Cam-192.168.205.167
Device Port
All
0 %
Time
Event Type
Event Status
Description
1 2013-09-25 15:26:10 Motion Motion Trigger Cam-192.168.205.167 - Motio..
2 2013-09-25 14:59:34 Motion Motion Trigger Cam-192.168.205.167 - Motio..
3 2013-09-25 14:55:48 Motion Motion Trigger Cam-192.168.205.167 - Motio..
4 2013-09-25 14:55:37 Motion Motion Trigger Cam-192.168.205.167 - Motio..
5 2013-09-25 14:55:26 Motion Motion Trigger Cam-192.168.205.167 - Motio..
6 2013-09-25 14:45:50 Motion Motion Trigger Cam-192.168.205.167 - Motio..
7 2013-09-25 14:45:40 Motion Motion Trigger Cam-192.168.205.167 - Motio..
8 2013-09-25 14:44:49 Motion Motion Trigger Cam-192.168.205.167 - Motio..
9 2013-09-25 14:40:05 Motion Motion Trigger Cam-192.168.205.167 - Motio..
10 2013-09-25 14:38:14 Motion Motion Trigger Cam-192.168.205.167 - Motio..
11 2013-09-25 14:37:26 Motion Motion Trigger Cam-192.168.205.167 - Motio..
12 2013-09-25 14:17:19 Motion Motion Trigger Cam-192.168.205.167 - Motio..
13 2013-09-25 14:16:59 Motion Motion Trigger Cam-192.168.205.167 - Motio..
14 2013-09-25 14:15:59 Motion Motion Trigger Cam-192.168.205.167 - Motio..
15 2013-09-25 14:15:13 Motion Motion Trigger Cam-192.168.205.167 - Motio..
16 2013-09-25 14:14:54 Motion Motion Trigger Cam-192.168.205.167 - Motio..
Search
Save
Print
Cancel

Figure 4-22

6 Network Service Configuration

Users can remotely browse for video/audio, e-map and event logs through Internet Explorer.

Instructions：

Click the Setup button , a dialog box named **Configurations** will be pop-up. Click on the **Network Service** (Figure 5-1)：

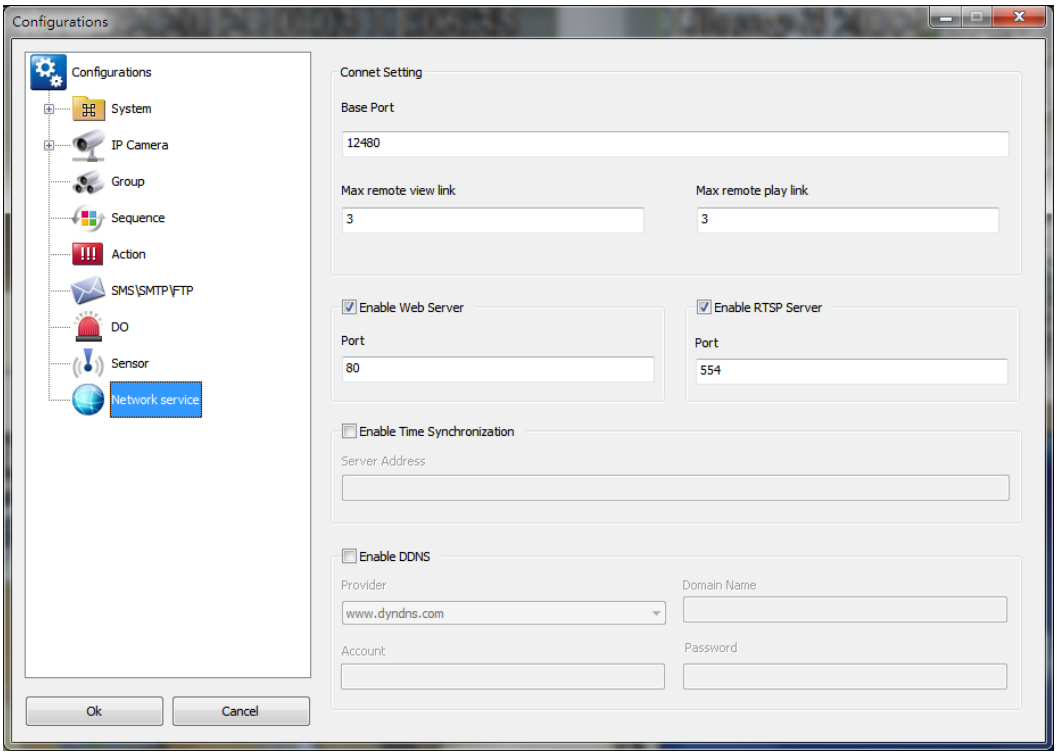


Figure 5-1

(1) Base port

The starting port number. The system default value is 12480.

(2) Enable Web Server

If this check box is checked, remote connections via MEGA NVR remote web client are allowable. Otherwise, users can't access MEGA NVR via web client. The default port number is 8086.

(3) Enable RTSP server

Check for this function and users can retrieve live view streaming via RTSP protocol on other players support RTSP.

(4) Enable time synchronization

If the checkbox is checked and the IP is inputted, MEGA NVR system will automatically synchronize its time with a NTP (Network time protocol) server as the IP user key-in.

(5) Enable Dynamic DDNS (Dynamic Domain Name Server)

Set the domain name of MEGA NVR for being able to be visited through a domain name address via Internet Explorer. Please check **Enable DDNS** first, and key-in DDNS provider, domain name, account and password.

(6) After setting above, open an IE browser, click **Tools -> Internet options -> Security** Ⓐ **-> Sites** Ⓑ, add the IP address of the MEGA NVR server IP address into the trusted sites Ⓒ Ⓓ Ⓔ (Figure 5-2 / Figure 5-3).

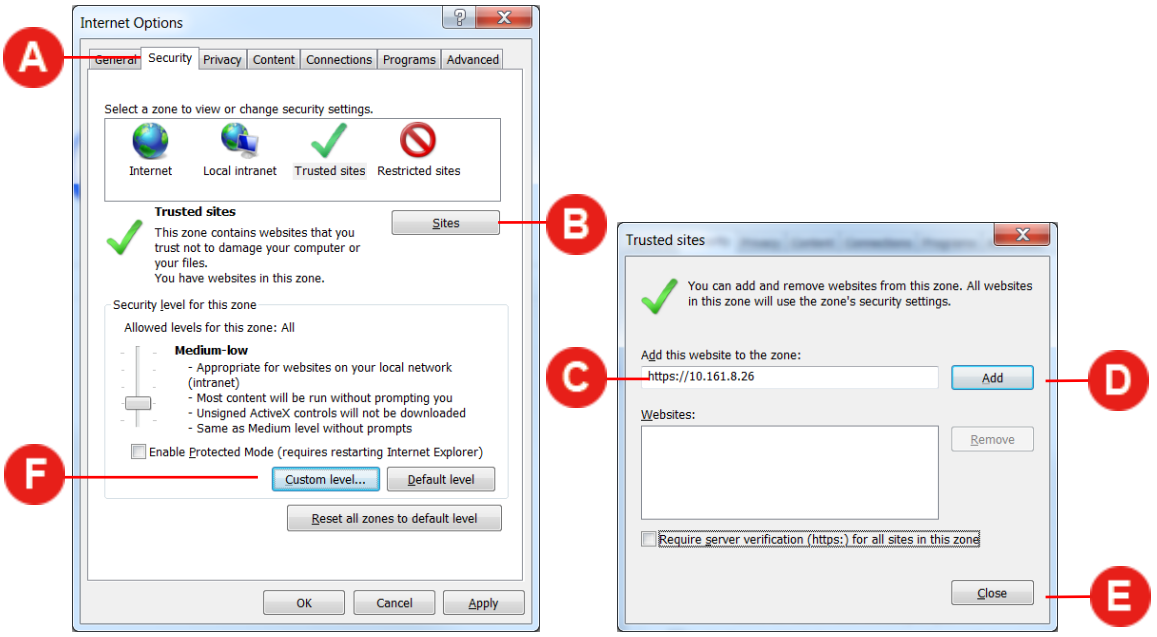


Figure 5-2 Figure 5-3

Click the Custom Level button (Figure 5-2, F), set the following two items to be **Enable**.

- Download unsigned ActiveX controls (Figure 5-4, A)
- Initialize and script ActiveX control not marked as safe for scripting (Figure 5-5, B)

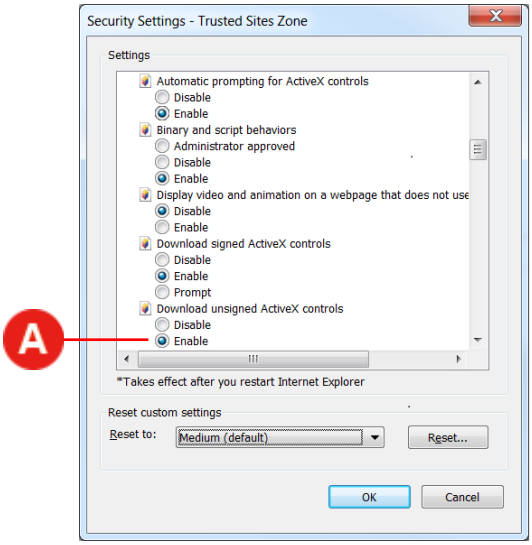


Figure 5-4

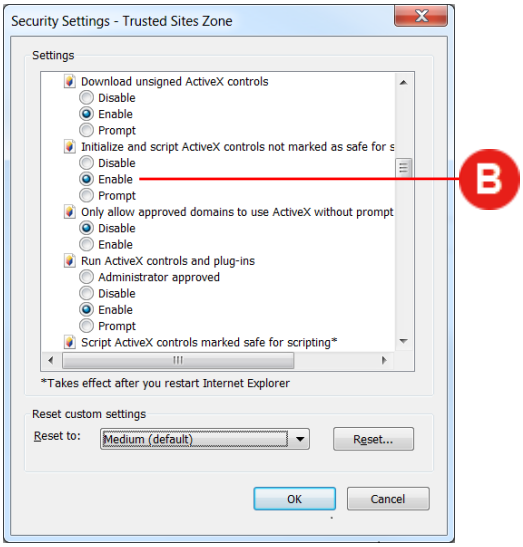


Figure 5-5

7 Remote web client

7.1 Log-in and Live View page

(1) Open IE browser, enter the MEGA NVR server's IP address with port number (default is 8086) (ex. 10.62.8.254:8086), and you will get the following web pages, the Log in page (Figure 6-1) and the Live View page (Figure 6-2).

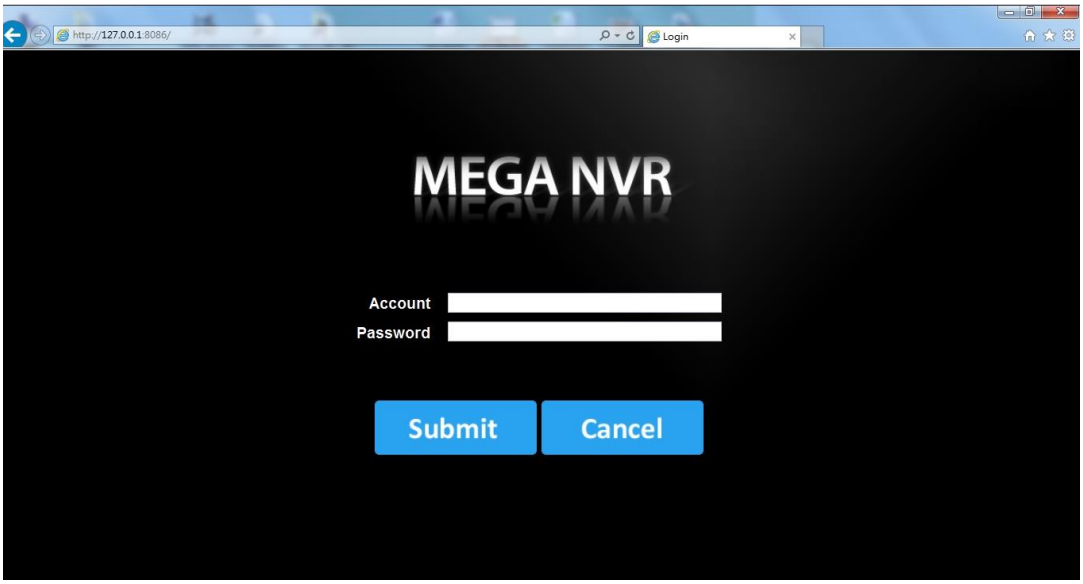


Figure 6-1

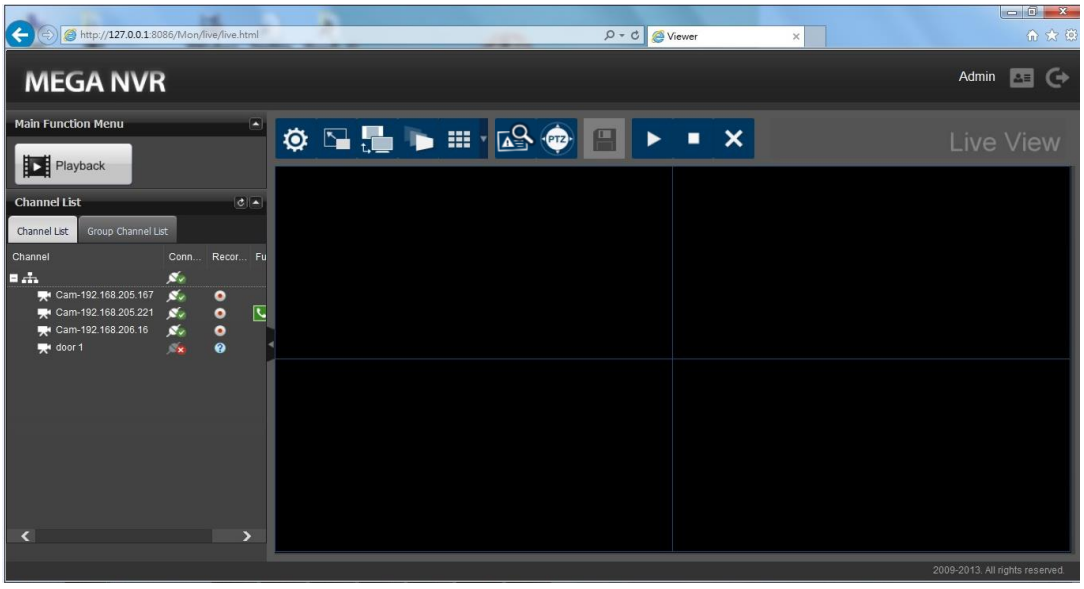


Figure 6-2

(2) Click on the Setting icon , the **Configurations** dialog box (Figure 6-3) will be pop-up. Users are able to configure the setting for the JPEG compression of **Snapshot**, **Sequence** details, and **Player** details.

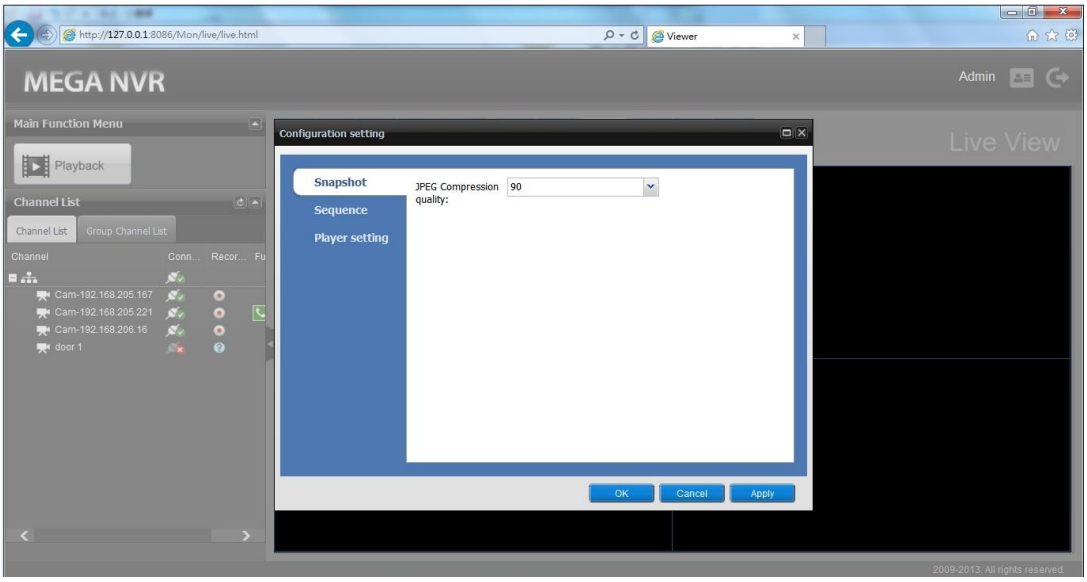


Figure 6-3

(3) Start to live view(Figure 6-4)

A. After successfully setting the channel group, go back to the main page of MEGA NVR remote WEB clients and the groups you made should be shown on the left column of this page.

B. Click play button next to the group and video of that group will all be displayed on the right side of this page. (Figure 6-4, B)

C. Click stop button to stop viewing video of that group, you can control the ball machine and for page segmentation. (Figure 6-4, C)

D. Press video layout to choose a video layout you desired. (Figure 6-4, D

E. PTZ controlling：If the channel you select supports PTZ, you can control its PTZ via the **PTZ Control Board**. (Figure 6-4, E)

F. Audio Listening：Choose a channel which you want to listen to, and click button to turn on its audio. (Figure 6-4, F)

G. Sequence viewing：Click on the Sequence button to start it or click again to stop. (Figure 6-4, G)

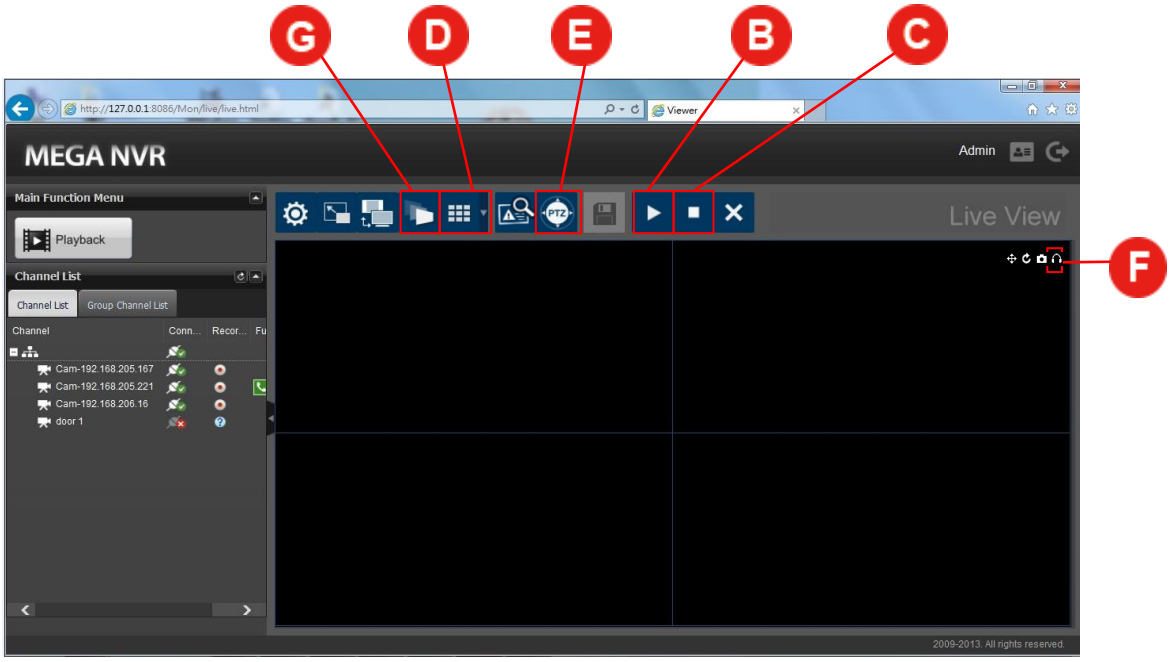

G
D
E
B
C
F
MEGA NVR
Admin
Main Function Menu
Playback
Channel List
Channel List
Group Channel List
Channel
Conn...
Recor...
Cam-192.168.205.167
Cam-192.168.205.221
Cam-192.168.206.16
door 1
Live View
2009-2013. All rights reserved.

Figure 6-4

7.2 Remote event search

(1) Click Event Search button to open the Event Search dialog box (Figure 6-5). Users are able to query events with a specific filter, ex. Time, Event Type, Event Status, Event Name, and Device Port.

(2) Click the Reset button, all of the search conditions will be restored to the default settings.

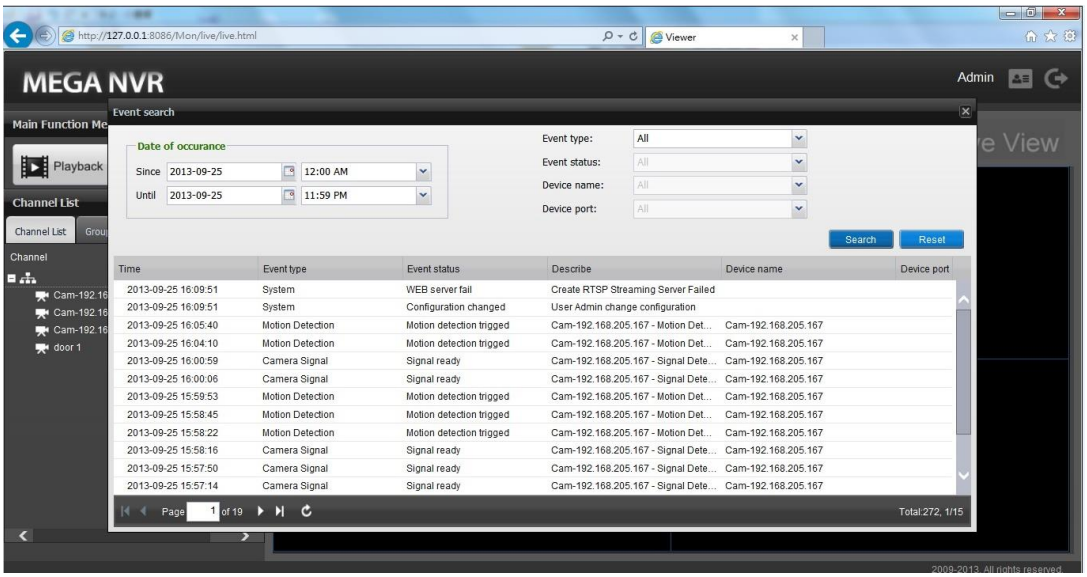

MEGA NVR
Admin
Event search
Date of occurance
Since 2013-09-25 12:00 AM
Until 2013-09-25 11:59 PM
Event type: All
Event status: All
Device name: All
Device port: All
Search
Reset
Time | Event type | Event status | Describe | Device name | Device port
2013-09-25 16:09:51 | System | WEB server fail | Create RTSP Streaming Server Failed
2013-09-25 16:09:51 | System | Configuration changed | User Admin change configuration
2013-09-25 16:05:40 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 16:04:10 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 16:00:59 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 16:00:06 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:59:53 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:45 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:22 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:16 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:57:50 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:57:14 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
Page 1 of 19
Total:272, 1/15
Playback
Channel List
door 1

Figure 6-5

7.3 Remote video playback

Click the Playback button

the upper left corner of the Live View page (Figure 6-6 A) and user will enter “Remote Playback” page. There are 2 ways for retrieving video data. User can also choose to listen to the channel recording audio or set the speed of playback.

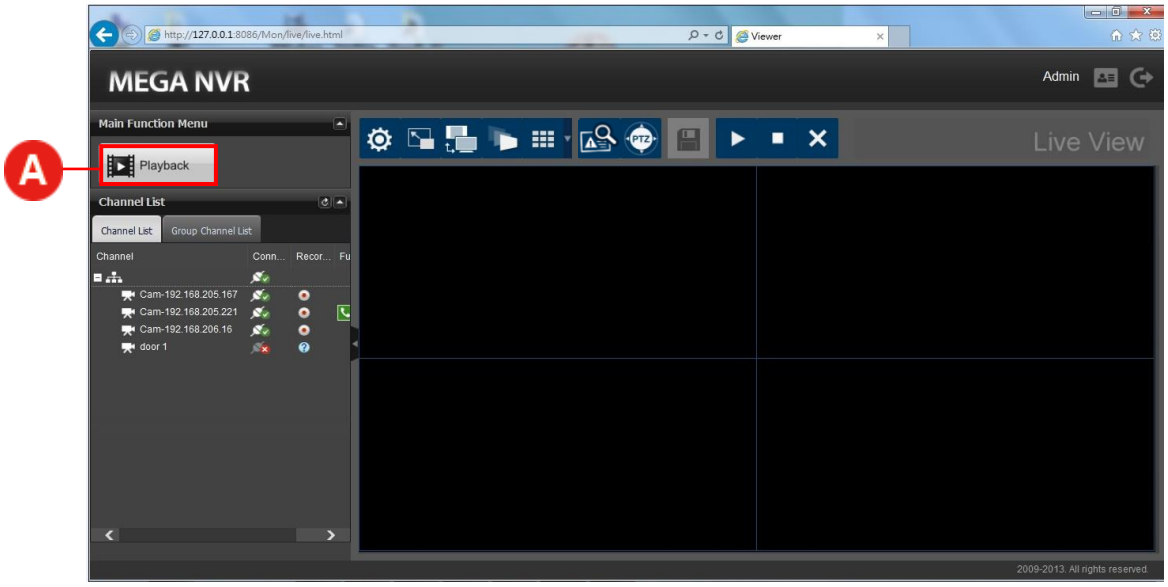


Figure 6-6

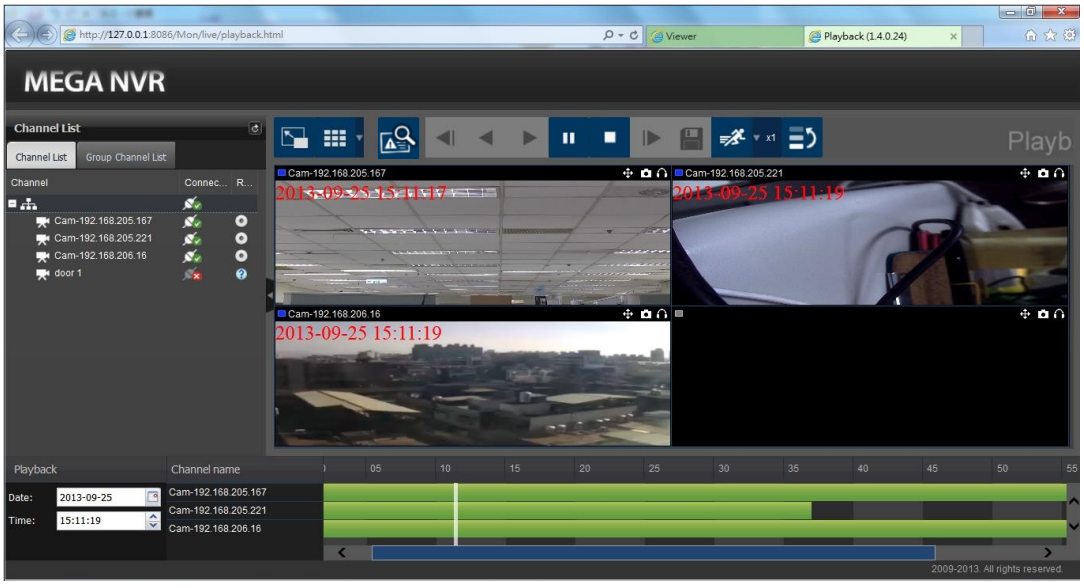


Figure 6-7

(3) Channel selection

Choose playback channels by dragging channel from the tree on the left side of this page, and drop it on the video window user desired.

(4) Event Search

Click Event Search button to open the Event Search dialog box (Figure 6-8). Users are able to query events with a specific filter, ex. Date of Occurrence, Event Type, Event Status, Event Name, and Device Port.

Click the Reset button, all of the search conditions will be restored to the default settings.

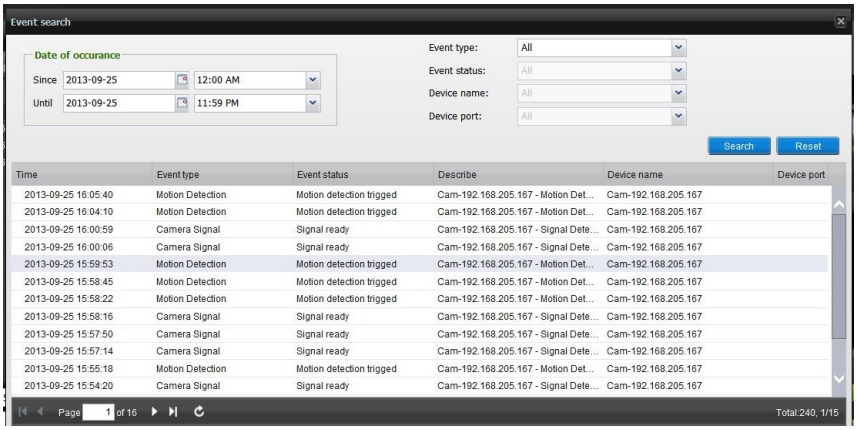

Event search
Date of occurance
Since 2013-09-25 12:00 AM
Until 2013-09-25 11:59 PM
Event type: All
Event status: All
Device name: All
Device port: All
Search
Reset
Time | Event type | Event status | Describe | Device name | Device port
2013-09-25 16:05:40 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 16:04:10 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 16:00:59 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 16:00:06 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:59:53 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:45 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:22 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:58:16 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:57:50 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:57:14 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
2013-09-25 15:55:18 | Motion Detection | Motion detection trigged | Cam-192.168.205.167 - Motion Det... | Cam-192.168.205.167
2013-09-25 15:54:20 | Camera Signal | Signal ready | Cam-192.168.205.167 - Signal Dete... | Cam-192.168.205.167
Page 1 of 16
Total:240, 1/15

Figure 6-8

(5) Playback speed

Click on **Playback Speed** and you will be able to set the play speed of all the video.

8 MEGA Player

For playing backup files, please follow steps as below:

1. Install MEGA Player with following instructions in the install shield.

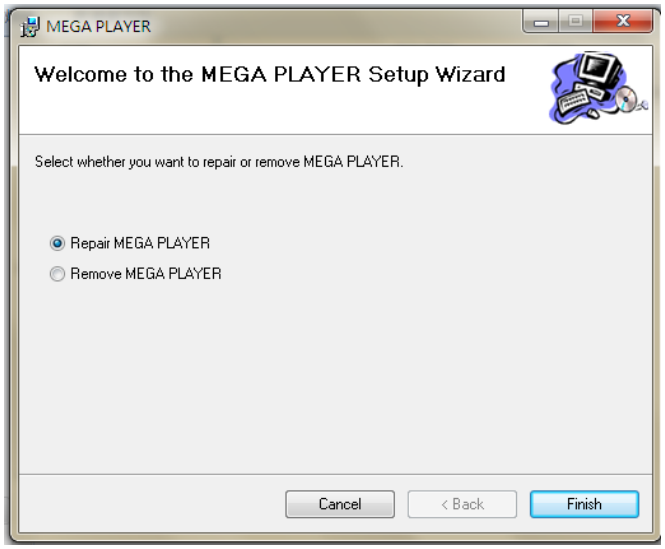


Figure 8-1

2. After finishing installation, click on the desktop.

3. Select a backup file by clicking on button (Figure 8-2)

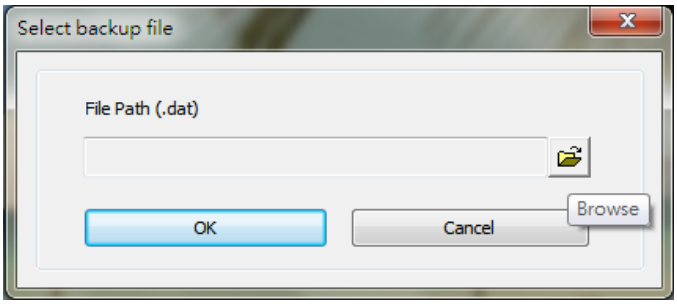


Figure 8-2

4. Start to playback with the similar user interface with the playback page of MEGA NVR, but some functions are disabled. (Figure 8-3) For detail operation, please refer to Chapter 5.

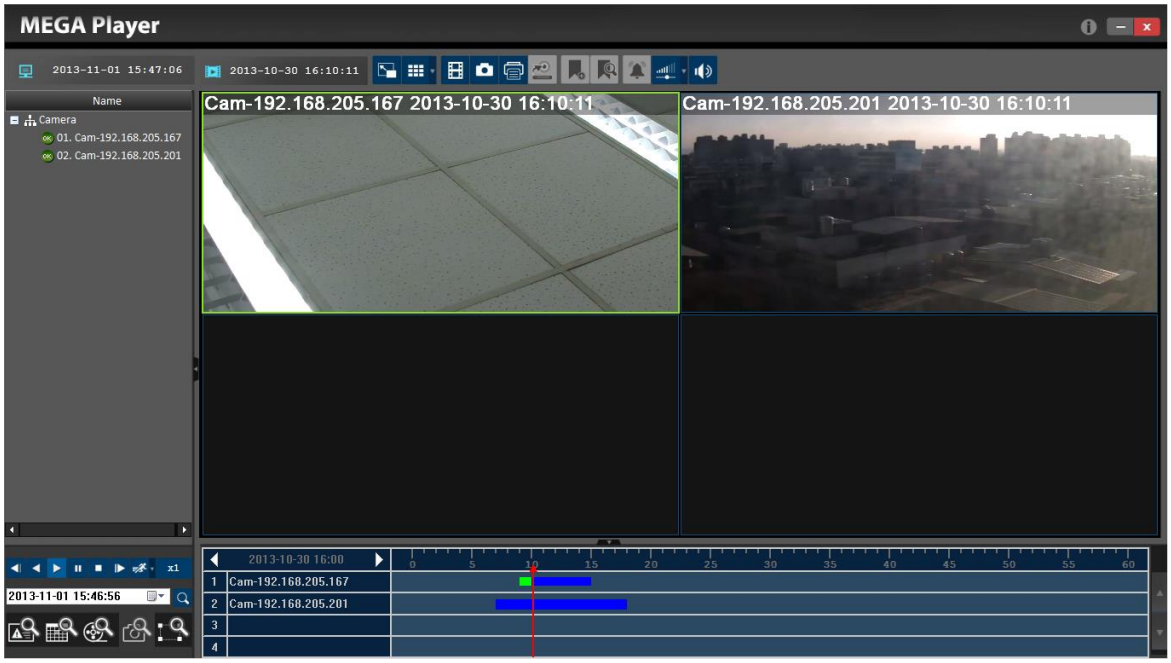

MEGA Player
2013-11-01 15:47:06
2013-10-30 16:10:11
Name
Camera
01. Cam-192.168.205.167
02. Cam-192.168.205.201
Cam-192.168.205.167 2013-10-30 16:10:11
Cam-192.168.205.201 2013-10-30 16:10:11
x1
2013-11-01 15:46:56
2013-10-30 16:00
0 5 10 15 20 25 30 35 40 45 50 55 60
1 Cam-192.168.205.167
2 Cam-192.168.205.201
3
4

Figure 8-3

9 Abbreviation and definition

- PTZ：Pan (Up and down), Tilt (left and right), Zoom & Focus control for speed dome, PT camera, camera with PT head attached, and camera with motorized zooming lens
- MPEG-4：Moving Pictures Experts Group, as the video/audio compression format
- H.264：Video/audio Codec compression format
- FPS：Frame per Second, indicates how many frames in one seconds for a video. Higher FPS value, more vivid the video
- 1080P：A kind of resolution, equal to Full HD, 1920 x 1080 two million pixels
- 720P：A kind of resolution, equal to HD, 1280 x 720 one million pixels
- D1：A kind of resolution, 720 x 480 pixels
- VGA：A kind of resolution, 640 x 480 pixels
- CIF：A kind of resolution, 352 x 288 pixel
- DDNS：Dynamic Domain Name Server/Service
- AVI：Audio Video Interleaved
- BMP：An image format without compression
- JPEG：An image format with compression
- IP：Internet Protocol, Internet Protocol address